AUTHOR INDEX

VOLUME 58

Abbas, Abul K., 3863
Acheson, David W. K., 2977
Achtman, Mark, 2008
Acosta, Alberto, 3893
Adachi, Yoshikazu, 3348
Adams, L. G., 879
Adams, L. Garry, 1153
Adams, Todd J., 2715
Adinolfi, Luigi E., 3151
Adolf, G. R., 3996
Águas, Artur P., 1461
Aguero-Rosenfeld, Maria E., 2214
Agwu, David E., 3508
Ahlborg, Niklas, 854
Ahmed, J. S., 3847
Aibara, Kageaki, 2929
Airo-Brown, Lucy P., 2021
Aitken, A., 761
Ajiki, Yoko, 2502
Akaike, Takaaki, 1269
Albright, Joseph F., 1757, 1965
Albright, Julia W., 1757, 1965
Alder, Jeffrey D., 1167, 1685
Alderete, J. F., 157
Alessi, Marie-Christine, 2459
Alkan, Michael, 566
Alouf, J. E., 1653, 2678
Amako, Kazunobu, 1421
Amano, Shigeru, 2542
Ambroise-Thomas, Pierre, 214
Amirante, Gianni A., 3751
Amlung, Thomas W., 2529
Anaissie, Elias J., 1514
Anakotta, Julius, 1870
Anders, Robin F., 2815
Andersen, Roxanna N., 3064
Anderson, Bruce C., 252
Anderson, Burt E., 2760
Anderson, G. A., 358
Anderson, Ian E., 3101
Anderson, Porter, 914
Andersson, Gudrun, 2989
Ando, Osamu, 3788
Anilionis, Algis, 3388
Annaix, Véronique, 48
Anthony, Bascom F., 1789, 3663
Antoine, Jean-Claude, 779, 1730
Antoine, Rudy, 1518
Antonacci, Anthony C., 3257
Antunes, C. M. F., 2198
Aono, Masao, 406, 2621
Apicella, Michael A., 1558, 2204
Araake, Minako, 3877
Arai, Sumio, 3564
Araujo, Fausto G., 263
Araya, L. N., 254
Arbeit, Robert D., 471
Argyle, J. Craig, 2343
Armstrong, Glen D., 3840
Arondel, Josette, 529
Aronovitch, Jacob, 2919
Arthur, Michel, 471
Asakawa, Hideharu, 289
Asano, Misako, 2386
Asavanich, Achara, 2995
Åslund, Lena, 854
Aso, Hiroshi, 1647
Atsumi, Yusaku, 4083
Attridge, Stephen R., 1620, 3129
Aubel, Dominique, 893
Audesho, A. A., 1909
Auriault, Claude, 2120
Aydintug, Mustafa K., 944
Azghani, Ali O., 433
Azuma, Ichiro, 2510, 3788

Baddour, L. M., 2906
Baertschy, David K., 1685
Baghian, Abolghasem, 1379
Bahr, George M., 315
Bailey, Gordon B., 43, 2389
Baker, Neil, 2361
Baker, Phillip J., 726, 1261, 2862, 3465
Bakker, Douwe, 1870
Baldridge, Jory R., 654
Baldwin, C. L., 3574, 3847
Baldwin, T. J., 761
Balish, Edward, 107, 1093, 3300, 3813
Ball, Janet E., 3903
Banas, Jeffrey A., 667
Banerjee, K. K., 3698
Banerjee-Bhatnagar, Nirupama, 2875
Bangsborg, Jette M., 2912
Banks, Steven M., 3002
Barat, T., 740
Barbaree, James M., 3139
Barbe, Genevieve, 214
Barbieri, Joseph T., 999
Barile, M. F., 598
Barker, L. P., 2906
Barker, Ruth M., 1891
Barros, G. C., 2198
Barrow, P. A., 2283
Barry, Ronald A., 654
Bartow, Rebecca A., 563, 1843
Bartowsky, Eveline J., 3129
Barza, Michael, 114
Baseman, J. B., 4163
Baseman, Joel B., 2017, 2669
Bate, C. A. W., 2923
Batt, R. M., 1316
Batteiger, Byron E., 2599
Baughn, Robert E., 766
Baum, Jules, 114
Baumann, I., 3847
Bayer, Arnold S., 1344
Beachey, Edwin H., 149, 566
Beagley, Kenneth W., 2785
Beaman, Blaine L., 3122
Beaman, LoVelle, 3122
Beattie, Ingrid A., 2792
Beatty, W. L., 378
Beaudet, Rejean, 2144
Beaudoin, Richard L., 2995
Becker, G. W., 1247
Beecher, Douglas J., 2220
Beesley, Julian, 3233
Beggs, Sandra, 283, 1664
Bélanger, Myriam, 3523
Bell, Judith A., 1848
Bellalou, Jacques, 1195, 3242
Belosevic, Miodrag, 3225
Beltran, P., 471
Beltran, Pilar, 1891, 2262
Beltz, Lisa A., 1114
Benjamin, William R., 2429
Bennett, Michael, 2289, 3807
Benz, Roland, 1355, 2127
Berche, Patrick, 841
Berenson, Charles S., 2888
Bergdoll, Merlin S., 1026
Bergmans, Hans, 1995
Berk, Richard S., 659, 1301
Berthold, Peter, 1782
Berzins, Klavs, 854, 2815
Berzofsky, Jay A., 3425
Besch-Williford, Cynthia, 1010
Bessler, Wolfgang G., 2719
Bester, Jon, 1323
Betley, Marsha J., 1614
Bezemer, Wilhelmina A., 26
Bhakdi, Sucharit, 2659, 3796
Bhattacharya, Alok, 3458
Bhattacharya, Sudha, 3458
Billiau, Alfons, 32
Binder, Alfred, 1584
Birch, Douglas F., 3401
Birkelund, Svend, 2098, 2478
Birkemeyer, Ralf G., 2659
Bisaillon, Jean-Guy, 2144
Bishop, R. P., 3574
Bissuel, G., 4076
Bistoni, Francesco, 1073
Björck, Lars, 1217
Bjornson, Gordean L., 1473
Blagburn, Byron L., 252, 2699, 2962, 2966
Blalock, Donna K., 3679
Blanco, David R., 1697, 3158
Blanco, Lorna, 3020
Blank, Kenneth J., 1796
Blasco, J. M., 489
Blaser, Martin J., 603, 2738
Blasi, Elisabetta, 1073
Bläsius, Rainer, 2008
Bleicker, Cheryl A., 1572
Bloch, Craig A., 275
Bloomquist, Cynthia, 3833
Blumenfeld, Walter, 456
Bodeau, Amy L., 3934
Bodey, Gerald P., 1514
Boedeker, Edgar C., 1124
Boehm, David F., 822, 1951, 1959
Boesman-Finkelstein, Mary, 4142
Bond, Walter W., 1223
Bonewald, Lynda F., 1572
Bonfiglioli, Roderick, 719
Bongrand, Pierre, 779
Bonventre, Peter F., 3020, 3151
Boom, W. Henry, 3863
Booth, Mary C., 3914
Boothby, John T., 1038
Borenstein, Lee A., 3158
Borinski, Ruti, 2770
Borojevic, Radovan, 816
Boros, Dov L., 1577
Bossé, J. T., 3829
Bouchara, Jean-Philippe, 48
Boucher, Shayne-Emile M., 3516
Bourgeois, A. L., 1924
Bourges, Michel, 893
Bourguin, Isabelle, 1240
Boushira, Michèle, 2105
Bout, Daniel, 1240
Boux, Heather A., 3653
Bowen, William H., 515, 2228
Boyko, Stephanie A., 2977
Boyle, Michael D. P., 332
Bozzini, Silvia, 449
Bracha, Rivka, 1660
Brade, Helmut, 205
Brade, Lore, 205
Brady, L. Jeannine, 332
Brahimi, Karima, 2995
Brandt, Mary E., 983
Brasseur, P., 4076
Brasseur, Robert, 2840
Brauer, Karen L., 283
Brawner, Diane L., 378, 1902
Brée, A., 740
Breider, Mike A., 1671
Brennan, P. J., 711
Bresatz, Suzanne, 3996
Bricker, Betsy J., 2935
Brickman, Timothy J., 4142
Briles, David E., 3293
Brinkley, William, 3494
Brinton, Charles C., Jr., 903
Bronsdon, Melinda A., 3947
Brooks, S. F., 761
Brouwers, Ruud A. M., 1870
Bruce, Andrew W., 2005
Brummer, Elmer, 2628
Brunham, Robert C., 189, 1450, 3061, 3438, 3909
Brunner, George D., 1538
Bryant-Varela, Bevie Jo, 3508
Bryla, Dolores, 2309
Buckley, Helen R., 1796
Buescher, E. Stephen, 3002
Bugnoli, Massimo, 1308
Bukholm, Geir, 2245
Bundle, David R., 1391
Burgess, Donald E., 3627
Burghoff, Robert L., 1141
Burns, Drusilla L., 1456, 4045
Burns, Gary J., 315
Burris, Jennifer A., 961, 2438, 3959
Bush, Antoinette, 674
Butler, Charles A., 3380
Byrne, Gerald I., 1572

Cabezon, Teresa, 2895
Cacalano, Grace, 2578
Caiazzo, Terri, 4089
Calderone, Richard, 309, 1552
Calderone, Richard A., 625, 909
Calderwood, Stephen B., 55, 1565, 2977
Caldwell, Harlan D., 1017, 2850
Callow, M. G., 1909
Calvano, Steve E., 3257
Camguilhem, Robert, 2690
Camilli, Andrew, 3770
Campagnari, Anthony A., 1558
Campanelli, Craig, 471

Campbell, G. D., 1247
Campbell, Lee Ann, 93
Camus, Daniel, 3537
Canales, Lourdes, 3941
Cancado, J. Romeu, 1437
Cannon, Janne G., 569
Cantorna, Margherita, 3813
Cantorna, Margherita T., 1093
Capron, A., 2446
Capron, André, 2120
Carias, Jean Robert, 98
Carlone, G. M., 3988
Carlone, George M., 3154
Carlson, E., 2750
Carman, Robert J., 4016
Caron, Judy, 874, 3442
Carr, Janice H., 1223
Carreiro, Margaret M., 2186
Carter, J. Mark, 2076
Casanova, Manuel, 3810
Casey, Thomas A., 4156
Cassady, G., 3487
Cassell, Gail H., 3487, 3558, 3679
Castellano, Elly, 2834
Catanzaro, Antonino, 2951
Caufield, P. W., 4126
Cavacini, Lisa A., 2946
Cavaillon, Jean-Marc, 2375
Chadee, Kris, 794
Chaffin, W. LaJean, 3810
Chakraborty, Trinad, 1943, 2127
Chambers, Christopher P., 1402
Champion, Cheryl I., 1697, 3158
Chang, Michael P., 2644
Chaparas, S. D., 1445
Chaparas, Sotiros D., 17
Chapman, Martin D., 1802
Chardès, Thierry, 1240
Charoenvit, Yupin, 2995
Chatfield, Steven N., 1323
Chauviere, Gilles, 893
Chavoya, A., 4163
Chavoya, Arturo, 2669
Chen, Priscilla B., 3394
Chen, Yu, 2386
Cheng, Shi Chi, 3671
Cheville, Norman F., 2320
Chhatwal, Gursharan S., 3015
Chikama, Hideki, 1647
Childers, Noel K., 1932
Childress, Adele M., 2613
Chiodo, Vince A., 2651
Chippendale, Gwynn R., 1281, 1992
Cho, Tamaki, 2139
Choi, Edmund M., 3020
Chong, Pele C.-S., 3653
Chow, Anthony W., 2392
Chowdhury, M. A. R., 4159
Chrisp, Clarence E., 674
Christensen, G. D., 2906
Christiansen, Gunna, 2098, 2478
Chugh, Tulsi D., 315
Cianciosi, Sam, 2470
Cianciotto, Nicholas P., 2912
Cieplak, Witold, 3337
Cihlar, Ronald L., 2061
Clabaugh, Matthew, 3009
Clark, Clifford G., 3840
Clark, Virginia L., 3929
Clark, W. B., 1986
Clark-Curtiss, Josephine E., 1327
Clawson, C. Carlyle, 4117
Clawson, Dawn J., 4117
Clemens, James R., 283
Clements, John D., 1159
Clevers, H., 3847
Cloeckaert, A., 3980
Cluff, Christopher W., 3601
Cluss, Robert G., 1038
Cockle, Stephen A., 3653
Cohen, Mitchell L., 1223
Cohen, Paul S., 1141, 1471, 2957, 3178
Cole, Barry C., 228
Cole, Garry T., 169, 179
Coleman, Sylvia E., 332
Colizzi, Vittorio, 245
Collins, Frank M., 2303
Collins, M. S., 1476
Collins, Michael L., 433
Collins-Lech, Cathleen, 2696
Colston, M. Joseph, 1937
Concepcion, Nelydia F., 1789, 3663
Conley, Frances K., 3050
Connelly, Jon C., 433
Connelly, Kathryn, 3819
Connolly, Kathryn, 3020
Conway, Patricia L., 1471, 3178
Cope, Leslie D., 2343, 3312
Coquis-Rondon, Miguel, 1048
Corbeil, Lynette B., 237, 3078
Corcione, Paola, 2177
Cornacchione, Paola, 3093
Cornelis, Guy, 2420, 2840, 2983
Cornette, Francine, 32
Corstvet, Richard E., 1671
Cortina, Galen, 999
Costerton, J. William, 2383
Cotton, Robin, 1705
Courtney, Harry S., 774
Cover, Timothy L., 603
Coward, Joseph E., 753
Cowart, Richard E., 2715
Cowell, James L., 7, 3337
Crain, Marilyn J., 3293
Crane, John K., 1402
Cravioto, Alejandro, 2262
Creely, Christine M., 753
Crenshaw, Rebecca W., 3194
Crichton, Pamela B., 1891
Cronan, Susan, 794
Cross, A. S., 373
Crouse, D. T., 3487
Crowe, Brian, 2008
Crowe, H., 471
Crowle, Alfred J., 632
Cryz, S. J., Jr., 373
Cuevas, William A., 131
Cumar, Federico A., 3966
Cuny, Carole L., 2888
Curtiss, Roy, III, 137, 464, 1879, 2276, 3084
Cutler, J. E., 378
Cutler, Jim E., 1902
Cutter, Deborah L., 266
Czuprynski, C. J., 1485
Czuprynski, Charles J., 3147

da Costa, C. A., 2198
Dahlgren, Claus, 37
Daikoku, Tohru, 2414
Dailey, Terry, 920
Dale, James B., 774
Dalehite, L., 2464
Dallo, S. F., 4163
Dallo, Shatha F., 2017, 2669
Dalrymple, Joel M., 366
Damiani, Guido, 245
Daneo-Moore, Lolita, 838
Danilition, Sandra L., 189
Dankert, Jaap, 3807
Darcy, F., 2446
Darcy, Françoise, 2120
Darfeuille-Michaud, Arlette, 893
Dasch, Gregory A., 1360
Daugherty, Tom, 3627
Davern, Lynda Beth, 3394
Davis, Carolyn H., 835
Davis, Cheryl D., 1, 1812
Davis, Elaine O., 1937
Dawson, Jeffrey R., 639
Dawson, Juleth R., 3924
Day, Diane B., 43
Dazin, Paul F., 3802
Dean, Evelyn A., 4030
Decavel, Jean-Pierre, 2120
Deepe, George S., Jr., 1538
de Graaf, Frits K., 801, 1870
DeHart, Del J., 3508
Deich, Robert A., 3272, 3388
de Jongh-Leuvenink, J., 421
de la Maza, Luis M., 938
Delga, Jean Michel, 1552
Delisse-Gathoye, Anne-Marie, 2895
Delor, Isabelle, 2983
Del Porto, Paola, 245
De Magistris, Teresa, 1308
de Man, Peter, 2056
de Meester, F., 1396
de Melo, Merivane A., 1749
de Nijs, Arne, 2177
de Oliveira, Albanita V., 3588
de Repentigny, Louis, 2105
Dertzbaugh, Mark T., 70, 1509
Desgranges, Claude, 2995
DeSilva, Leel, 2258
DesJardins, Denise, 1835
Deslee, D., 2446
de Souza, Wanderley, 586
Dessaint, J. P., 2446
Destree, Antonia, 4089
Detilleux, Philippe G., 2320
Detolla, Louis J., 3415
Devenish, J., 3829
De Vos, A. J., 2171
de Wergifosse, P., 3980
de Wilde, Michel, 2895
de Wit, Madeleine Y. L., 80, 2821
Deyoe, Billy L., 2320, 2935
Dho-Moulin, M., 740
Diamond, Louis S., 3458
Diamond, Richard D., 1174, 3765
Dias, M., 2198
Díaz, R., 489
Dijkmans, Roger, 32
Dilworth, R. J., 1909
DiRita, Victor J., 55
Di Rosa, Massimo, 3183
Di Tommaso, Annalisa, 1308
Dobbelaere, D. A. E., 3847
Dobrina, Aldo, 3751
Doig, Peter, 124
Dolan, T. T., 3574
Dombroski, D. M., 2014
Domdey, Horst, 2241
Domer, Judith E., 2613
Donelli, G., 2329
Donnenberg, Michael S., 1565
Donohue-Rolfe, Arthur, 1565, 2977
Donowitz, G. R., 3307
Dooley, Cornelius P., 603
Dougan, Gordon, 732, 1323
Dove, C. H., 480
Dowling, J., 3307
Dowling, John N., 1153
Drancourt, Michel, 2459
Drasar, Bohumil S., 3375
Dreyfus, Lawrence A., 3645
Druilhe, Pierre, 2995
Drumm, Brendan, 3056
Dubey, J. P., 2699
Dubray, G., 3980
Dubremetz, Jean-François, 1240
Dubreuil, Daniel, 3523
Duchêne, Michael, 2241
Duncan, M. J., 1290
Duquesne, Véronique, 2120
Durack, David T., 2115
Duschner, H., 1043
Dutta-Roy, K., 3698

Easingwood, Richard A., 3689
Eaton, Kathryn A., 2606
Ebnet, Klaus, 1711
Eckhardt, Ansley, 2241
Eckstein, J., 1924
Edén, Catharina Svanborg, 3073
Edman, Jeffrey C., 1705
Edwards, John E., Jr., 3765
Eftekhar, Fereshteh, 1344
Eichhorn, M., 3847
Eifuku, Hiroko, 163
Eisenhauer, Patricia, 3899
Eisenstein, Barry I., 2912, 3737
Ekre, Hans-Peter, 2989
El-Cheikh, Marcia C., 816
Eldridge, John H., 2785
Elkins, Christopher, 1078
Elkins, Nancy, 632
Elleman, Thomas C., 1545, 1678
Ellen, Richard P., 3924
Elliott, David E., 1577
Elson, Charles O., 3711
Embaye, H., 1316
Endo, Tamao, 3073
Endoh, Masahiko, 1456, 4045
Engberg, Inga, 2056
England, Douglas M., 144
Engleberg, N. Cary, 2912
Engleman, Edgar G., 703, 711
Engstrand, L., 1763

Erickson, Pamela R., 515, 4117
Eriks, Inge S., 1117
Ernst, Martin, 808
Ernst, R. K., 2014
Esaguy, Nair, 1461
Espersen, Frank, 3363
Esser, Ronald E., 1327
Esslinger, Jürgen, 2690
Estabrook, Michele M., 2204
Ewanowich, Carol A., 3187

Fahey, Thomas J., III, 3257
Fahim, Raafat E. F., 3653
Fahr, Michael J., 3194
Faille, Christine, 3537
Fairweather, Neil F., 1323
Falkow, Stanley, 7, 443, 1059, 4036
Farfel, Zvi, 3759
Farinelli, Senia, 1073
Farrell, Catherine F., 2777
Farrell, Timothy P., 1201
Fasano, Alessio, 3717
Fattom, A., 2547
Fattom, Ali, 2309, 2367
Fauntleroy, Michael B., 726, 1261, 2862
Fayer, Ron, 257
Fayer, Ronald, 2962, 2966
Fedorka-Cray, P. J., 358
Fennell, Cynthia L., 3947
Ferrante, Antonio, 788, 3996
Ferretti, Joseph J., 667, 2452
Ferris, Kathleen, 2262
Fey, Stephen J., 2478
Ficht, Thomas A., 1153
Fidel, Paul L., Jr., 393
Fields, Barry S., 3139
Fierer, Joshua, 1180
Filutowicz, Hanna, 107
Finke, Matthias, 2241
Finkelman, Fred D., 961
Finkelstein, R. A., 4011
Finkelstein, Richard A., 2352, 4142
Finlay, B. Brett, 443
Finlay-Jones, John J., 4004
Finn, Theresa M., 2516
Finney, Kenneth G., 1545
Fiorentini, C., 2329
Fischlschweiger, W., 1986
Fitting, Catherine, 2375
FitzGerald, David, 1415
Flad, Hans-Dieter, 808
Flesch, I. E. A., 269, 2675
Fletcher, J. N., 1316
Flöer, Barbara, 3796
Flores, Becky M., 753, 3947
Flynn, Joanne L., 3425
Focht, D., 3307
Fogg, George C., 2738
Forestier, Christiane, 828
Forget, A., 3531
Forgiarini, Ornella, 3751
Formal, Samuel B., 2002
Fornella, Milton H., 978
Forney, L. J., 1065
Forney, Larry, 2252
Forrest, Bruce, 1620
Forstner, Janet F., 860, 868
Fortier, Anne H., 4149
Foster, J. M., 3487
Fox, Alvin, 835
Fox, James, 2149, 2606
Frane, Cynthia M., 427
Franzon, Vicki L., 529
Frasch, Carl E., 2875
Freudenberg, Marina, 3743
Friedlander, Arthur M., 1606
Friedman, Richard L., 3621
Fries, Lisa, 1167
Froehlich, J., 1924
Fu, Richard ChiaGing, 3469
Fuchs, A., 3582
Fujii, Nobuhiro, 3173
Fujita, Kazuhiko, 579
Fukuda, Shigeharu, 2510, 3788
Fukushima, Jun, 4083
Fulginiti, James, 3388
Fürer, E., 373
Furukawa, Mayumi, 3564

Gaastra, Wim, 2177
Gahring, Lorise C., 443
Galán, Jorge E., 1879, 3116
Galanos, C., 935
Galdiero, Francesco, 3183
Galdiero, Marilena, 3183
Gale, Andrew, 3009
Galey, Bénédicte, 2995
Galland, Robert B., 1807
Gamazo, C., 489
Gamble, H. Ray, 3883
Ganem, Don, 3816
Ganz, Tomas, 3899, 3934
Garcia, Mary, 3601
Garfinkel, Leonard I., 1660
Garner, Carol V., 1835
Garner, Ronald E., 412, 2613, 2869
Garon, Claude F., 847
Gärtner, Klaus, 1584
Garzon, Simon, 2105
Gathiram, Vinodh, 1802
Gaydos, Charlotte A., 593
Gazzano, Helene, 1817
Gazzinelli, Giovanni, 1437
Gazzinelli, Ricardo T., 1437
Geelen-van den Broek, Lea, 3807
Gelber, Robert H., 703, 711
Gemski, Peter, 3494
Genna, Gioia, 4136
Gennaro, Renato, 3724
Geoffroy, Christiane, 3242
George, F. W., IV, 575
George, V., 3988
Georgopoulos, Costa, 719
Getty, B., 1316
Ghadirian, E., 1971
Ghildyal, Reena, 3458
Ghose, A. C., 3698
Ghose, Asoke C., 1106
Ghosh, A. N., 3698
Giesbrech, Peter, 197
Gigstad, Joan E., 114
Gilardini, Maria S., 245
Gilbart, James, 835
Gillin, Frances D., 3516
Gilmore, Keeta S., 2452
Gilmore, Michael S., 3914
Gilmour, Jeffery R., 43
Gilmour, Jeffrey R., 2389
Gilsdorf, J. R., 1065
Gilsdorf, Janet R., 2252
Ginsburg, V., 611
Ginsburg, Victor, 2085
Giovannoni, Franco, 1308
Girard, Christiane, 3523
Girardeau, J. P., 740
Giuliano, M., 2329
Glew, Robert H., 1153
Glick, Joseph, 970
Gobet, D., 439
Godard, I., 2446
Goebel, W., 3582
Goebel, Werner, 1500, 1943
Gogolewski, Ronald P., 237
Goidl, Edmond A., 1261
Goldberg, Marcia B., 55, 2977
Goldhar, Janina, 3737
Goldschmidt, Raul M., 2276
Goldstein, Richard, 471
Golenbock, Douglas T., 4069
Gombert, Frank Otto, 2719
Gong, Ke, 515
Gonias, Steven L., 833
Goodwin, Matina St. Mary, 3445
Gorden, Jed, 3425
Gorenflot, A., 4076
Goss, Christopher, 794
Goud, S. Niranjan, 2035
Govan, John R. W., 1489
Granger, Donald L., 2115
Graves, Patricia, 1408
Gray, Barry M., 3293
Gray, Lynn D., 433
Grayston, J. Thomas, 93
Green, Bruce A., 3272, 3388
Green, Deborah M., 1281
Gregory, Stephen H., 2313
Grenier, Daniel, 347
Griffiss, J. McLeod, 456, 2204
Griffiths, Verity J., 2156
Grimminger, Friedrich, 2659
Grootenhuis, J. G., 3574
Groover, K., 598
Gross, Mitchell, 2995
Grote, Wilhelm, 1273
Grundy, Frank J., 320
Guenounou, Moncef, 2828
Guerrant, Richard L., 794, 1337
Guerry, Patricia, 2686
Guidry, Albert, 2962, 2966
Guiney, Donald G., 1180
Gulig, Paul A., 2651
Gustavsson, S., 1763
Gwanzura, Lovemore, 3553
Gyles, Carlton L., 1232

Habig, W. H., 598
Habig, William H., 1004
Hacker, J., 1500, 3434
Hacker, Jörg, 2133
Haeffner-Cavaillon, Nicole, 2375
Haggerty, John, 3883
Hagihara, Yoshisato, 2139
Haidaris, Constantine G., 2228
Halabi, Amal, 557
Hall, Robert H., 3375
Hall, Roger, 1828
Halpenny, M., 1247
Halpern, Jane L., 1004
Hammerschlag, Margaret R., 3640
Hamood, Abdul N., 1133
Hampton, Randolph Y., 4069
Hanada, Nobuhiro, 2882
Hanazawa, Shigemasa, 2542
Handman, Emanuela, 2297
Hansen, Eric J., 914, 2343, 3312
Hanski, Emanuel, 3759
Hansson, Gunnar C., 2361
Hara, Nobuyuki, 1647
Harboe, Morten, 272
Hardegree, M. C., 598
Harel, Josée, 3523
Harinasuta, Tranakchit, 2995
Harmsen, Allen G., 297
Harp, J. A., 2237
Harper, Coral F., 43
Harper, Fiona H., 4016
Harris, Sandra L., 3448
Harrison, Jeffrey L., 2628
Hart, C. A., 1316
Harth, Guenter, 586
Hartskeerl, Rudy A., 80, 2821
Harwig, Sylvia S. S. L., 3899
Häse, C. C., 4011
Haslov, Kaare R., 726
Hasløv, Kaare, 2862
Hatch, Thomas P., 3194
Havell, Edward A., 297, 2397
Havican, Kelly, 4089
Hawdon, John, 3883
Hay, D. I., 1986
Hazen, Beth W., 3469
Hazen, Kevin C., 1902, 3469
Hazenberg, Maarten P., 523
Hazlett, Linda D., 1301
Head, Susan, 1532
Hector, R. F., 1476
Hedrich, Hans J., 1584
Heffron, Fred, 443
Hefta, Stanley A., 2165
Heiberger, Antje, 1711
Heidari, Manijeh B., 2637
Heinrichs, Leroy, 263
Hejka, Anthony G., 144
Helander, Ilkka M., 1691
Helmuth, Reiner, 2262
Henricson, Beth E., 2429
Heremans, Hubertine, 32
Hermand, Philippe, 2420
Hermanns, Walter, 1584
Heron, Iver, 2895
Herring, Alan J., 3101
Herrington, D. A., 1481
Herrington, Deirdre A., 2002
Herzberg, Mark C., 515, 4117
Hess, Cynthia B., 399
Hewlett, Erik L., 1402
Hicks, J. B., 2804
Hiernaux, Jacques R., 1261
Higbie, Linda M., 581
Hill, David R., 2683, 3202
Hillman, J. D., 1290
Himeno, Yasuo, 3564
Hinrichs, David J., 654
Hirayama, Toshiya, 3568
Hirofuji, Takao, 2621
Hobbs, Marcia M., 2115
Hodges, Robert S., 124, 2727
Hodgson, Jennifer L., 3078
Hoehn, Gerard T., 3929

Hoepelman, Ilja M., 26
Hoff, Frederica A., 4117
Hoffman, Paul S., 3380
Hoffmann, Petra, 2719
Hofmann, Theo, 695
Høiby, Niels, 2383, 3363
Holder, Ian Alan, 1527
Holland, Steven M., 593
Hollingshead, S. K., 4126
Holloway, B. P., 3988
Holloway, Brian P., 3154
Holmgren, Jan, 341, 399
Holst, Elisabeth, 1217
Holst, Otto, 205
Holt, S. C., 1720, 2770
Holthöfer, Harry, 3330
Holtmann, Helmut, 3168
Hom, John, 1634
Honda, Takeshi, 4106
Hong, Kyongsu, 2535
Hook, Magnus, 2593
Hormaeche, Carlos E., 2258
Horst, Michael N., 412, 2869
Horton, John R., 2017
Horvat, Rebecca, 3009
Hoschützky, Heinz, 2133
Hoshiko, Melvin, 938
Hotez, Peter, 3883
Houston, Laura, 3380
Howell, Samuel E., 978
Hoyne, Peter A., 1545, 1678
Hu, Li-Tai, 992
Huang, Pei-tang, 970
Hudson, John, 2869
Hudson, Michael C., 464
Huether, M. J., 358
Hull, Richard, 279
Hull, Richard A., 4055
Hull, Sheila, 279
Hull, Sheila I., 4055
Human, Liset G., 2613
Humphres, Robert C., 495
Humphreys, Robin C., 2071
Hunjan, Manjeet, 3407
Hunt, Robert, 3494
Hunter, S. W., 711
Hussong, David, 17
Hüther, F.-J., 1043
Huygen, Kris, 2192
Hviid, Lars, 3163
Hyde, Scott R., 619

Iacono-Connors, Lauren C., 366
Iams, Keith Paul, 1828
Iandolo, John J., 131
Ichinose, Yoshio, 4106
Ichinose, Yukito, 1647
Idziorek, Thierry, 1415
Igarashi, Hideo, 3877
Igarashi, Ken-Ichi, 1254, 3973
Iglewski, Barbara H., 1133
Ijiri, Sumiko, 1269
Imanishi, Ken'ichi, 3877
Indoh, Tomokazu, 3173
Inoko, Hidetoshi, 3877
Inoue, Kozo, 2535
Inoue, Masakazu, 163
Irvin, Randall T., 124
Isaacs, Robin D., 2025
Israelski, Dennis M., 263
Ito, Hideaki, 3568
Ito, James I., Jr., 2021
Ivens, Keith, 1817
Ivins, Bruce E., 303
Iwaki, Masaaki, 289, 2929
Iwamoto, Yasuyuki, 2621
Iwanaga, Masaaki, 61, 1640, 4106
Iwase, Masayasu, 1782
Iwata, Masayuki, 1384, 2502
Izhar, Mateen, 2258

Jäättelä, Marja, 1085
Jackson, Susan, 1932
Jackson, Terry F. H. G., 1802
Jacob, Françoise, 2895
Jacobs, E., 2464
Jacobson, Gary R., 543, 1479
Jacques, Mario, 3523
Jakab, George J., 2809
Jakobsen, P. H., 2923
Jann, Barbara, 2710
Jann, Klaus, 2133, 2710
Jarvis, Gary A., 456
Jenkins, Paula R., 2869
Jenkinson, Howard F., 1429, 3689
Jenner, Peter J., 1937
Jensen, Elsebeth Tvenstrup, 2383
Jett, Marti, 3494
Jeyakumar, Loice H., 1937
Ji, Geun Eog, 3029
Jimenez-Lucho, Victor, 2085
Joens, Lynn A., 1101
Johannsen, Lars, 197
Johnson, Alice R., 433
Johnson, Arthur G., 427
Johnson, Bobby, Jr., 3871
Johnson, David E., 1120, 1281
Johnson, J. L., 480
Joly, Bernard, 893
Jones, Bradley D., 1120, 1281
Jones, Dana C., 2760
Jones, David W., 3078
Jones, Gareth E., 3101
Jones, Sylvia M., 1796
Jones, William G., II, 3257
Jonson, Gunhild, 399
Jonsson, AnnBeth, 2555
Jörgensen, A., 1763
Jouanne, Colette, 779
Joysey, Heather S., 2258
Judge, Bradley A., 2935
Juhan-Vague, Irene, 2459
Julian, Nancy C., 3508
Julien, Raymond, 98
Jung, Günther, 2719
Jungalwala, Firoze B., 114
Jutila, Mark A., 1902

Kabashima, Hiroaki, 2621
Kabilan, Lalitha, 2989
Kaeckenbeeck, Albert, 2983
Kaga, Shuji, 1210
Kahl, Lesley P., 3233
Kalo-Klein, Aliza, 260
Kaminishi, Hidenori, 2139
Kanamoto, Taisei, 289, 2929
Kane, Patricia K., 4117
Kaneda, Yoshimasa, 955
Kanemitsu, Hirohito, 1210
Kania, Stephen A., 237
Kaper, J. B., 1481
Kaper, James B., 1565, 2706, 3442
Kaplan, Alan M., 2035
Kapperud, Georg, 2245
Kappus, Elizabeth W., 593
Kar, Siddhartha, 903
Karakawa, Walter W., 2367
Kariuki, T. M., 3574
Karlsson, Inga, 21
Karlsson, Karl-Anders, 2555
Karpas, Arthur B., 1445
Karr, Joan F., 4055
Karvonen, Marjatta, 1691
Kasahara, Keita, 1210
Kasahara, Mayumi, 2502
Kasama, Tsuyoshi, 1210
Kasimir, S., 1653
Kaslow, Harvey R., 746
Kastern, William, 1217
Kathariou, S., 3988
Kato, Iwao, 2745
Kato, Jun-ichi, 3325
Kato, Tetsuo, 416
Kato, Yasuko, 955
Katz, Jannet, 2785
Kaufmann, S. H. E., 269, 2675
Kawada, Harumi, 2502
Kawaguchi, Mariko, 2414
Kawamoto, Susumu, 4083
Kawamura, Ikuo, 1254
Kawasaki, Hiroshi, 4083
Kawasaki, Masayuki, 1647
Kawasumi, Hiromi, 1369
Kay, Bradford A., 3717
Kazemi, Mohammad, 2352
Keith, Barry R., 3448
Kelke, C., 3847
Kelly, Charles, 3407
Kelly, David C., 2487
Kenimer, James G., 746
Kenny, Peter A., 4004
Keren, Zvi, 1802
Kerr, M. A., 1979
Ketley, J. M., 1481
Keusch, Gerald T., 1565
Kharazmi, Arsalan, 2383, 3163, 3363
Kierszenbaum, Felipe, 119, 1114
Kieser, Scott T., 1117
Kilian, Mogens, 1186, 1628
Kim. Cheung, 471
Kim, Mary F., 2637
Kim, Youn Uck, 2535
Kimura, Alan, 7, 3337
Kimura, Kouichi, 3173
Kimura, Tatsuji, 2510
Kimzey, Lorene M., 2309
Kincaid-Smith, Priscilla, 3401
Kinoshita, Taroh, 2535
Kirchhoff, Helga, 1273, 1584
Kirkley, David H., 3272
Kirsch, Mary, 3893
Kirsch, Stephen J., 2375
Kirschke, Heidrun, 1730
Kishimoto, Susumu, 1369, 3286
Kist, Marion L., 695
Kitagawa, Ryuichi, 579
Kitano, Shigeo, 2542
Kjelleberg, Staffan, 1471
Klaasen, Pia, 801
Klatser, Paul R., 80, 2821
Klein, Michel H., 3653
Klemm, Per, 1995
Klempner, Mark S., 2569
Klimpel, Gary R., 399
Klyczek, Karen K., 1796
Knapp, Stefan, 2516
Knight, Stephen, 835
Knoblock, Kenneth F., 3627
Knudson, Gregory B., 303
Knutton, S., 761
Kobata, Akira, 3073
Kobayashi, Kazuo, 1210
Kobayashi, Koumei, 4049
Kobayashi, Seiki, 955
Kobayashi, Yuzuru, 887
Kobisch, Marylene, 352
Koga, Toshihiko, 289, 2929
Kohanawa, Masashi, 2386
Köhler, Stephan, 1943
Kojima, Yuichiro, 1269
Kolenbrander, Paul E., 3064
Kolk, Arend H. J., 80
Kolly, C., 439
Kolodrubetz, David, 920
Kolotila, Michael P., 1174
Kongshavn, P. A. L., 1971
König, B., 1591
König, W., 1500, 1591, 1653, 2678
Konkel, Michael E., 1101
Kopecko, Dennis J., 2262
Korchak, Helen M., 1782
Korhonen, Timo K., 3330
Kornbluth, Richard S., 2564
Kosma, Paul, 205
Kotani, Shozo, 536
Kotb, Malak, 566, 774
Kovacs, Joseph A., 1705
Kozel, Thomas R., 1914, 1919
Kozono, Haruo, 2535
Kraig, Ellen, 920
Krakowka, Steven, 2606
Kramer, Michael D., 1711
Krause, Duncan C., 3430
Krause, Martin, 1180
Krauss, Jürgen H., 3743
Krausse, Rea, 205
Krebsbach, Paul H., 515
Kreeftenberg, Johan Gerrit, 1308
Kreft, B., 3434
Kreger, Arnold S., 266
Kreiswirth, Barry N., 2067
Kress, Kendra, 1802
Krieg, Debra P., 4020
Krieger, John N., 1634
Krivan, H. C., 611
Krivan, Howard C., 2085
Krogfelt, Karen A., 1995
Kroll, Hein-Peter, 222
Kröncke, Klaus-Dietrich, 2710
Kronvall, Göran, 21
Kruse, David, 169, 179
Krystal, Gerald, 2392
Kubota, Ichiro, 1647
Kudo, Naoko, 163
Kuhn, Michael, 3477
Kuhn, Raymond E., 1, 1812, 3248
Kuhns, Janet S., 4020
Kuipers, Betsy, 3036
Kullberg, Bart-Jan, 3319
Kuller, Larene, 3947
Kumagai, Keiko, 3568

Kumar, Nirbhay, 1408
Kumar, Sanjai, 3425
Kumar, Sarmishtha, 1671
Kumaratilake, Lakshmi M., 788, 3996
Kuo, Cho-chou, 93, 502, 2042
Kuramitsu, Howard K., 3462, 4099
Kuratana, Mano, 914
Kusumoto, Shoichi, 536
Kusumuto, Shoichi, 217
Kutsukake, Hiroshi, 536
Kuwano, Koichi, 3564
Kwaik, Yousef Abu, 1558
Kwiatkowski, D., 2923
Kwon-Chung, K. J., 2804
Kwon-Chung, Kyung Joo, 1552

Labbé, Ronald G., 1999
Labigne, Agnes, 279
LaBrooy, Justin, 1620
Ladant, Daniel, 1195, 3242
Lafont, J. P., 740
Lagergard, Teresa, 687
Lai, Char-Huei, 3833
Lai, Wayne C., 2289
Lala, Harish C., 1429
Lally, Edward T., 1782
Lam, Kan, 2383
Lamb, F. Ian, 1937
Lamont, Peter M., 1807
Lamont, Richard J., 1738
Langhorne, Jean, 3671
Larsen, Peter Mose, 2478
Latimer, Jo L., 3312
Lauermann, Michael W., 938
Laux, David C., 1141, 1471, 2186, 2957
Law, Judy L., 575
Lawrence, Robert M., 970
Lay, Jeng-Guang, 3469
Lecointre, O., 4076
Lee, Adrian, 2606
Lee, Cynthia K., 2516
Lee, K. K., 124
Lee, Kok K., 2727
LeFebvre, Rance B., 1744
Leffler, Hakon, 2361
Legaard, Paul K., 978
LeGrand, Roy D., 978
Lehner, Thomas, 3407
Lehrer, Robert I., 3899, 3934
Leid, R. Wesley, 944
Leimeister-Wächter, Michaela, 1943
Leirisalo-Repo, Marjatta, 1085
Lelchuk, Rosalia, 3233
Leme, Vania M. C., 1437
Lengeler, Joseph W., 543
Leon, Myron A., 2401
Leon, Ofra, 3779
Lepper, Anthony W. D., 1678
Leppla, Stephen H., 1606
Lesse, Alan J., 1558
Leung, K.-P., 1986
Leung, Ka Yin, 3262
Leusch, Mark S., 3621
Levene, Cyril, 3807
Levine, M. M., 1481
Levine, Myron M., 1620, 2002, 3717
Levitz, Stuart M., 1201
Levy, Gary A., 1821
Levy, Pierre-Yves, 2459
Levy, Rachel, 566
Lewis, Fred A., 3903
Lewison, John F., 1992
Leying, Hermann, 222
L'Hostis, M., 4076
Libby, Peter, 3743
Libby, Stephen J., 131
Liebster, Laura, 3863
Liljemark, William F., 3833
Lima, M. S., 2198
Limet, J. N., 3980
Lindberg, Alf A., 2493
Linden, Joel, 1402
Lindén, Mats, 37
Linder, Henrik, 2056
Lindler, Luther E., 2569
Lindsay, David S., 2699
Lingwood, Clifford, 1532
Lipke, P. N., 2804
Lipke, Peter N., 1552
LiPuma, John J., 1600
Little, Stephen F., 303, 1606
Liu, Hsi, 1685
Liu, T. Y., 2198
Ljungqvist, Lene, 2192
Lloyd, Clare M., 2156
Locht, Camille, 1518, 2895
Lock, Ronny, 37
Lockatell, C. Virginia, 1120, 1281
Lockman, Hank A., 137
Logan, Susan M., 2686
Lombardi, Giovanna, 245
Long, Gary W., 1965
Loomes, L. M., 1979
Loosmore, Sheena M., 3653
Loppnow, Harald, 3743
Losonsky, G., 1481
Lostrom, Mark E., 3819
Lottspeich, Friedrich, 1943
Lovett, Michael A., 1697, 3158
Loyer, Magali, 2144
Lu, Yue-Shoung, 2289
Lue, C., 2547
Lue, Cummins, 2309
Lundemose, Anker G., 2098, 2478
Lundgren, Bettina, 1705
Lundgren, Jens D., 1705
Lupan, David M., 1919
Lyerly, D. M., 480
Lyng, Karen, 2701
Lyons, Janet, 4089
Lyons, Joseph M., 2021

Ma, Julian K.-C., 3407
Maas, Werner K., 970
MacFarlane, Gordon D., 515
Mackenzie, Donald W. R., 3537
MacLaren, D. M., 3954
Maclean, Ian W., 189, 3061
MacLeod, David L., 1232
Macmillan, James D., 2220
Macrina, Francis L., 70, 1509
Maeda, Hiroshi, 1269, 2139
Maeda, Katsumasa, 406, 2621
Magee, B. B., 949
Magee, D. Mitchell, 1572
Magee, P. T., 949
Mahr, Anna, 4089
Maia, Luiz C. S., 3588
Majumdar, Gipsy, 566
Makino, Kozo, 4106
Makoff, Andrew J., 1323
Malcolm, Georgia B., 2940
Malorni, W., 2329
Malouin, F., 1247
Maloy, Lee, 1408
Manclark, Charles R., 1456, 4045, 4063
Mandine, Eliane, 2828
Mandrell, Robert E., 456, 2204
Manetti, Roberto, 1308
Maneval, David R., 3442
Maneval, David R., Jr., 3717
Manjarrez Hernandez, H. A., 761
Manjula, Gopalraj, 515
Manning, D. Scott, 2850
Manning, Dean D., 1848
Manning, Patrick J., 2733
Manning, Paul A., 3129
Manor, Esther, 1886
Mansfield, John M., 2337
Marana, David P., 1360, 2076
Marchal, Christian, 4145
Marchand, Claudine, 2995
Marconi, Pierfrancesco, 3093
Mardis, E., 2076
Markoff, Brian A., 938
Marre, R., 3434
Marri, Laura, 838
Marrs, C. F., 1065
Marsh, Kevin, 214
Marsili, Ilio, 1308
Martin, W. John, 575
Martínez, Jose P., 3810
Martinez-Palomo, Adolfo, 3941
Martinod, S., 439
Marx, Jo J. M., 26
Masiello, Sandra, 3183
Maskell, Duncan, 732
Maskell, Duncan J., 1323
Mason, Patricia H., 257
Mason, Peter R., 3553
Massof, Steven E., 1296
Mastrantonio, P., 2329
Matsuo, Kazuhiro, 550, 4049
Matsuura, M., 935
Matteucci, Giacomo, 1308
Mauracher, Christof A., 1473
Mawhinney, T. P., 2906
Mayer, Cynthia L., 3765
Mayer, Hubert, 3743
Mayer, Leonard W., 3154
Mayfield, John E., 2048, 2935
Mayrhofer, Graham, 3129
Mayrink, W., 2198
McBride, Barry C., 347
McCallum, Roderick E., 619
McClane, Bruce A., 3109
McCollister, Bruce D., 2067
McConnell, M. M., 341
McCoomer, Norman E., 2389
McCormick, Beth A., 2957
McCracken, George H., Jr., 2343
McCrea, K. W., 1065
McCrea, Kirk, 2252
McDaniel, Larry S., 3293
McDonald, Gregory A., 645, 2760
McDonald, Peter J., 4004
McElhaney-Feser, Gail E., 2061
McElrath, M. Juliana, 3893
McEvoy, Susan J. Martin, 1261
McGee, Zell A., 719
McGroarty, Estelle J., 1030
McGroarty, Jacqueline A., 2005
McIlheran, Sarah M., 3002
McIntosh, Mark A., 2637, 4142
McKenzie, Sara, 4089
McKevitt, Aideen I., 1473
McMurray, David N., 563, 1843
Mead, Jan R., 2071
Meding, Sally J., 3671
Meitner, Sean W., 2228
Mekalanos, John J., 1614, 2516, 3706
Melo, M. N., 2198
Mencher, David, 557
Meno, Yuko, 1421
Mensi, Nahla, 2404
Merletti, Lucio, 3093
Merrick, J. M., 2014
Mertsola, Jussi, 2343
Mestecky, J., 2547
Mestecky, Jiri, 1932, 2309, 3073
Metcalf, Benjamin J., 3272, 3388
Mevelec, Marie-Noelle, 1240
Meyers, Desiree J., 659
Meylan, Pascal R., 2564
Mezzopreti, Marina Filippone, 245
Michalek, Suzanne M., 1932, 2785
Michalick, M. S. M., 2198
Michalski, Jean Claude, 3537
Michiels, Thomas, 2840
Miliotis, Marianne D., 2470
Miller, James N., 1697, 3158
Miller, Louis H., 3425
Miller, Mark F., 639
Miller, Matthew S., 2529
Miller, Ruth, 680
Miller, Samuel I., 3706
Milon, Alain, 2690
Milstone, Leonard, 3883
Minagawa, Tomonori, 2386
Minei, Joseph P., 3257
Mintzer, Carole L., 563
Mirelman, D., 1396
Mirelman, David, 1660, 1802
Misfeldt, Michael L., 978, 2409
Mitchell, Thomas G., 639
Mitsuyama, Masao, 1254, 3973
Miwatani, Toshio, 4106
Miyasaki, Kenneth T., 3934
Miyoshi, Shin-Ichi, 4159
Mizuno, Junn, 163
Mobley, Harry L. T., 992, 1120, 1281, 1992
Mohagheghpour, Nahid, 703, 711

Molina, N. Christine, 2523
Molla, Akhteruzzaman, 1269
Monferran, Clara G., 3966
Monson, J. M., 711
Montecucco, Cesare, 4136
Mook, Dianna, 3813
Moon, H. W., 2237
Moon, Harley W., 4156
Moors, Marlena A., 1796
Mooser, Gregory, 2165
Morgan, Donna R., 2606
Morgan, Stephen, 835
Morihara, Kazuyuki, 4083
Moriyón, I., 489
Morona, Renato, 1620
Morrill, William E., 3139
Morris, J. Glenn, Jr., 1769, 2470, 2706, 3415
Morris, Sheldon L., 17, 1445
Morrison, Richard P., 2701
Morrison, W. I., 3847
Morschhäuser, Joachim, 2133
Mortatti, Rodney C., 3588
Mortensen, Steen B., 1186
Morton, William R., 3947
Mosci, Paolo, 3093
Moseley, Steve, 279
Mostow, Peter, 3633
Moter, Sabine E., 1711
Mouallem, Meir, 3759
Moulds, John, 279
Moulds, John J., 4055
Mounier, Joëlle, 1048, 3477
Mountzouros, Kenneth T., 7, 3337
Mouricout, Michele, 98
Moxon, E. Richard, 3455
Mühlradt, Peter F , 1273
Mukhopadhyay, Nishit K., 1153
Munk, Martin E., 3588
Munn, Malcolm W., 703, 711
Muotiala, Anna, 1691
Murakami, Tadayuki, 3173
Muramori, Katsumi, 3973
Murphy, James R., 2002
Murphy, Juneann W., 393
Murray, Henry W., 3893, 3941
Murray, L. P., 711
Murthy, Seetha, 3469
Musher, Daniel M., 3135, 3871
Musoke, Anthony J., 1828
Musser, James M., 1891, 2262
Myers, Kent, 726

Nachamkin, Irving, 2214
Nacy, Carol A., 4149
Nagai, Masaaki, 1456, 4045
Nagai, Sadamu, 272
Nagakura, Kouichi, 955
Nagao, Shigeki, 536
Nagase, Yasukazu, 3788
Nagauker, Ofra, 566
Nair, Balakrish G., 3325
Nair, G. Balakrish, 2755
Nakabayashi, Naomi, 3568
Nakajo, Mona N., 3640
Nakamoto, Yuji, 3568
Nakamura, Reiko M., 1210
Nakane, Akio, 2386
Nakanishi, Masayuki, 536
Nakase, Yasukiyo, 1456, 4045
Nakasone, Noboru, 61, 1640
Nakata, Atsuo, 4106
Nakatani, Kazuko, 1210
Nardon, Ermanno, 3751
Nascimento, E., 2198
Nast, Cynthia C., 1344
Nauciel, Charles, 573
Naveh, M. W., 1129
Neale, Elaine A., 1004
Neale, K. A., 157
Neely, Alice N., 1527
Neeper, Indra D., 2042
Neill, Roger, 3494
Nelson, David R., 2186
Nelson, James W., 1489
Nencioni, Luciano, 1308
Nesbitt, W. E., 1986
Neumann, A. Wilhelm, 3056
Nibbelink, Stuart K., 88
Nickerson, Cheryl L., 2809
Nielsen, Egon, 1217
Niemann, Gina M., 3903
Niesel, David W., 399
Nishibuchi, Mitsuaki, 3568
Nishikawa, Hirofumi, 2542
Nnalue, Ndubisi A., 2493
Noda, Masatoshi, 2745
Noel, E. J., 1485
Nomoto, Kikuo, 1254, 3973
Noordhoek, Gerda T., 2011
Norgard, Michael V., 384, 983
Norman, Bo, 3731
Normark, Staffan, 2555
Norqvist, Anders, 3731
Notermans, Serve, 2127
Notman, Derek, 1489
Novick, Richard P., 2067
Novotny, Pavel, 352, 732
Nowakowski, Maja, 3640
Nowicki, Bogdan, 279
Nowicki, Bogdan J., 4055
Nucci, Daniele, 1308
Nudelman, Edward D., 43
Numata, Akihiko, 2386
Nyberg, Gunilla, 2555
Nygren, Per-Åke, 854
Nyvad, Bente, 1628

Oaks, Edwin V., 1360, 2076
Oberley, Terry D., 107
O'Brien, A. D., 611
O'Brien, Alison D., 2438, 3959
O'Connor, Steven P., 3154
Oda, Tatsuya, 1269
Odean, Marilyn J., 427
Ofek, Itzhak, 566, 3737
Ogawa, Akira, 3325
Ogawa, Hideoki, 2856
Ogle, John W., 4020
Oguma, Keiji, 3173
Ogunnariwo, Julius A., 2091
O'Hanley, Peter, 1817, 3029
Ohbayashi, Hirokazu, 3073
Öhman, Lena, 37
Ohmori, Toshihiro, 1254
Ohno, Takeshi, 2510, 3788
Ohshima, Y., 1350
Ohta, Mitsuo, 1647
Okada, Takanori, 887
Okahashi, Nobuo, 289, 2929
Okuda, Katsuji, 416
Okuda, Kenji, 4083
Old, David C., 1891
Oliver, James D., 1769
Olivieri, Roberto, 1308
Ollert, Markus W., 625, 909
Opferkuch, Wolfgang, 222
Oppenheim, Joel D., 970
Orefici, Graziella, 3093
Orndorff, Paul E., 275, 3448
Ørskov, Frits, 2710
Ørskov, Ida, 2710
Ortmann, Monika, 3143
Ostroff, Rachel M., 4020
Otto, B. R., 3954
Otto, Glen, 2606

Padda, J. S., 2972
Pakes, Steven P., 2289
Pal, Ruma, 1106
Pal, S. C., 3698
Pal, Sukumar, 3061
Palchaudhuri, Sunil, 2401
Palmer, Guy H., 1117
Panicali, Dennis, 4089
Panigrahi, P., 2149
Panigrahi, Pinaki, 3415
Panjwani, Noorjahan, 114
Panos, Charles, 3779
Papini, Emanuele, 4136
Paque, Ronald E., 680
Paradisi, S., 2329
Paranchych, William, 124, 2727
Park, Kyong Bin, 1999
Parke, Lydia A., 2946
Parker, Charlotte D., 2523
Parmely, Michael, 3009
Parr, T. R., Jr., 1247
Pastan, Ira, 1415
Patriarca, Pierluigi, 3751
Patton, Dorothy L., 2042
Paul, Chris, 2995
Paulaitis, Suzanne, 3621
Paulsen, Hans, 205
Paxton, Raymond J., 2165
Payan, Donald G., 3802
Payne, Candia D., 508
Payne, Nathaniel R., 1789, 3663
Pazzaglia, G., 1924
Pearce, John H., 3208
Pearson, Terry W., 3500
Pechère, Jean-Claude, 1749
Pedersen, Svend Stenvang, 3363
Pedneault, Louise, 2105
Peel, J. E., 439
Peeling, Rosanna, 189, 3909
Pellett, Shahaireen, 822
Peltz, Gary A., 2404
Pelzel, Sharon E., 3312
Pelzer, Marga, 3036
Peppler, Mark S., 3187
Perara, Eve, 3816
Percival, David A., 2487
Perera, L. P., 611
Perez-Casal, Jose, 3594
Perez Folgar, Jorge, 1408
Perfect, John R., 1664, 2115
Perlman, Alon M., 2628
Perlmann, Hedvig, 2815
Perlmann, Peter, 854, 2815, 2989
Perng, Guey-Chuen, 1744
Perry, Dennis, 3462
Perry, Malcolm B., 1391
Perryman, Lance E., 257
Peters, G., 1350
Peterson, Barry T., 433
Peterson, Darrell L., 70
Peterson, Ellena M., 938
Petit, Jean Michel, 98
Petri, William A., Jr., 1802
Pettersson, Annika, 3036
Peyron, Francois, 214
Pfefferkorn, E. R., 833
Phelps, C. J., 480
Philpott, Delbert E., 2628
Piccolella, Enza, 245
Pickering, William J., 3401
Picot, Stephane, 214
Pier, Gerald B., 1835
Pierantoni, Miguel, 1757
Pierson, Dorothy E., 1059
Piggot, Patrick J., 838
Pileri, Piero, 1308
Pillemer, Graciella, 557
Pine, L., 3988
Pine, Leo, 2940
Pizza, Mariagrazia, 999, 1308
Pla, Marika, 573
Platt, Yehudit, 2919
Plaut, Andrew G., 320
Playfair, J. H. L., 2923
Plikaytis, Bonnie B., 3154
Plikaytis, Brian D., 2940
Ploton, Isabelle, 2995
Podoba, John E., 3225
Pohl, Roderike, 3202
Polacheck, Itzhack, 2919
Policova, Zdenka, 3056
Polk, Hiram C., Jr., 1807
Poole, Joyce, 3807
Poolman, Jan T., 1355, 3036
Portnoy, Daniel A., 3770
Poulain, Daniel, 3537
Poy, Florence, 543, 1479
Pramoonjago, Patcharin, 2535
Precigout, E., 4076
Presentini, Rivo, 1308
Prévost, Marie-Christine, 3477
Price, R. E., 879
Price, S. B., 480
Prina, Eric, 779, 1730
Prince, Alice, 2578
Prince, S. J., 2547
Probst, Peter G., 1445
Proctor, Mary, 2733
Prospero, T. D., 3847
Pryjma, Julius, 808
Psarros, N., 1043
Puentes, Stephen M., 1789
Pugatsch, Thea, 557
Pugliese, Agostino, 4153
Pulkkinen, Wendy S., 3706
Pulverer, G., 1350
Puohiniemi, Ritvaleena, 1691

Quataert, Sally A., 3272, 3388
Que, Xu-Chu, 4099
Quentmeier, Hilmar, 1273
Quie, P. G., 1350
Quinn, Carole A., 961
Quinn, Thomas C., 593
Quinn-Dey, Tammy, 3272, 3388
Qureshi, Nilofer, 2862

Raaschou-Nielsen, Mette, 2895
Radika, Kesavan, 3653
Radin, M. Judith, 2606
Radolf, Justin D., 384, 983, 2025
Raetz, Christian R. H., 4069
Ragheb, Samia, 1577
Raja, Rampyari H., 2593
Ramakrishnan, Meena D., 4016
Ramirez, Miguel A., 119
Ramotar, Karam, 1532
Rank, Roger G., 2599
Raoult, Didier, 2459
Rappuoli, Rino, 245, 999, 1308
Raucci, Giuseppe, 2593
Raulf, M., 2678
Ravdin, Jonathan I., 3941
Ray, Thomas L., 508
Raybourne, Richard B., 1774
Reardon, I., 3307
Recchia, Simona, 3093
Reed, Sharon L., 753
Regnery, Russell L., 2760
Reid, Gregor, 2005
Reid, Ronald E., 1450
Reid, William C., 674
Reinholdt, Jesper, 1186
Reinitz, David M., 2337
Reisner, Barbara S., 3262
Relman, David A., 7
Remington, J. S., 263
Remington, Jack S., 3050
Repo, Heikki, 1085
Resau, James H., 1992
Rest, Richard F., 1078, 2777
Reymann, Mardi, 1620
Reynolds, David J., 3208
Rhodes, Judith C., 2529
Rich, Chantal, 893
Rich, Kathryn A., 575
Richard, L., 3531
Richard, Stéphane, 841
Richards, Frank, 3883
Richardson, Angela L., 2869
Richardson, Kathleen, 3633
Richardson, Richard P., 3257
Richman, Douglas D., 2564
Richman, Harry, 1600
Rietschel, Ernst T., 217
Riezu-Boj, J. I., 489
Riggs, Michael W., 257
Riipi, L., 2750
Riise, Gert, 2361
Rikkerink, Erik H. A., 949
Riley, Bryan S., 983
Riley, Eleanor M., 2989
Riley, Lee W., 1223
Riley, Lela K., 1010
Ristola, Matti, 1085
Ritter, Dianne M., 3248
Rivera, Mildred, 1030
Robbins, J. B., 2547
Robbins, John B., 687, 2309, 2367
Robert, Raymond, 48
Roberts, Angela L., 2516
Roberts, Mark, 732
Robertson, Nancy P., 3627
Robins-Browne, Roy M., 2470
Roblin, Patricia M., 3640
Röck, R., 2464
Roditi, I. J., 3847
Roe, Bruce A., 2076
Rogers, James C., 835
Rogers, Thomas J., 1796
Rojanavanich, Viboon, 2856
Roll, Jon T., 3147
Romeo, Domenico, 3724
Ron, E. Z., 1129
Ronco, Esthel, 573
Rosan, Burton, 1738
Rosati, Emanuela, 3093
Rosenbaum, Beverly, 1514
Rosendal, S., 3829
Rosok, Mae Joanne, 3819
Roth, German A., 3966
Rotstein, Ori D., 1821
Rottem, S., 598
Rottini, Giandomenico, 3751
Roudier, Chantal, 1180
Rouse, David A., 17, 1445
Rowan-Kelly, Brenton, 3996
Rowe, B., 341
Rowe, Gail, 822
Rowley, Derrick, 1620
Rozenblatt, Shmuel, 1660
Rubin, Fran A., 2262
Rubin, L., 3307
Ruelle, Jean-Louis, 2895
Rumschlag, Hella S., 1223
Rush, Howard G., 674
Russell, Michael W., 3545
Russell, P. Walker, 3448
Russell, Robert G., 2149, 3415, 3717
Russell, Roy R. B., 667, 2452
Ruysschaert, Jean-Marie, 2840
Ryan, John L., 2888
Ryter, Antoinette, 1048
Rzepczyk, Christine M., 788, 3996

Sack, R. B., 1924
Saco, Montserrat, 3613
Sadoff, J. C., 373
Saffer, Linda D., 1802
Sagiya, Tsuyoshi, 2542
Saha, Asish K., 1153
Saiman, Lisa, 2578
Saito, Shinji, 3877
Sajjan, S. Umadevi, 860, 868
Sakamoto, Hiroshi, 1195, 3242
Salata, Robert A., 3941
Salit, Irving E., 695
Salkowski, Cindy A., 3300
Salles, Marie-France, 2828
Sammons, David W., 2071
Samonis, George, 1514
Sampson, Jacquelyn S., 3154
Samuel, J. E., 611
Samuel, James E., 3959
Sanden, Gary N., 3139
Sanford, Joan E., 1919
San Gabriel, Alberto, 3613
Sansonetti, Philippe J., 529, 1048, 3477
Sareneva, Timo, 3330
Sarmiento, Juan I., 2149
Sarov, Israel, 1886, 3168
Sarvas, Matti, 1691
Sastry, Parimi A., 124
Sathish, M., 1327
Sato, Hiroko, 3369
Sato, Ikuyo Y., 1210
Sato, Yuji, 3369
Satoh, Takumi, 3564
Saunders, J. R., 1316
Sawyer, Richard T., 2869
Saxén, Leena, 1085
Saxena, Ashima, 309, 2061
Schachter, Julius, 1572
Schad, Gerhard, 3883
Schad, Peter A., 3337
Scharfstein, Julio, 1437
Scheffer, J., 1500, 1591
Scheifele, David W., 1473
Schell, Ronald F., 144, 1167, 1685
Schellekens, J., 421
Scherf, Artur, 854
Scheynius, A., 1763
Schiavo, Giampietro, 4136
Schifferle, Robert, 3394
Schifferli, Dieter, 774
Schifferli, Dieter M., 149
Schiffman, Gerald, 2309
Schilling, Kurt, 515
Schlager, Theresa A., 1337
Schlageter, Annette M., 1914, 1919
Schlievert, Patrick M., 2067
Schlotterbeck, John D., 746
Schmaljohn, Connie S., 366
Schmid, Angela, 2127
Schmitt, Edgar, 1273
Schmitz, John L., 144
Schneerson, R., 2547
Schneerson, Rachel, 687, 2309, 2367
Schnittler, Hans, 3796
Scholze, H., 1396
Schönfeld, W., 1591, 1653
Schrevel, J., 4076
Schryvers, A. B., 2972
Schryvers, Anthony B., 2091
Schumacher-Perdreau, F., 1350
Schwan, A., 1763
Schwan, Tom G., 847
Schwartzman, Joseph D., 833
Scott, Cheryl A., 3233
Scott, June R., 874, 3442, 3594
See, Raymond H., 2392
Seeger, Werner, 2659, 3796
Segarra, Robert A., 3914
Segers, Ruud P. A. M., 2177
Selander, Robert K., 471, 1891, 2262
Selsted, Michael E., 3706, 3934
Sen, Anubha, 2401
Sénéchal, Serge, 2105
Senet, Jean-Marcel, 48
Senior, B. W., 1979
Servin, Alain, 893
Seshan, K. R., 179
Severijnen, Anton J., 523
Shade, Ulrich, 217
Shaffer, Linda, 1379
Shah, G. R., 4126
Shahin, Roberta D., 4063
Shaw, Carolyn E., 3042
Shaw, E., 1396
Shaw, K., 1971
Sheehan, John K., 1489
Shemer-Avni, Yonat, 3168
Shenker, Bruce J., 3856
Shepherd, Maxwell G., 1429
Sherman, Philip M., 3056
Shiba, Tetsuo, 217, 536
Shiloach, Joseph, 687, 2367
Shimizu, Kihachiro, 2502
Shimizu, Tetsuya, 1647
Shimonishi, Yasutsugu, 2755
Shimozato, Takaichi, 1384, 2502
Shinagawa, Hideo, 4106
Shinoda, Sumio, 4159
Shirai, Hiromasa, 3568
Shires, G. Tom, 3257
Shires, G. Tom, III, 3257
Shively, Jack E., 2165
Shortridge, Virginia D., 4020
Shuhaiber, Hani J., 315
Shuman, Howard A., 2585
Shuttleworth, Andrew D., 2487
Siadak, A. W., 3819
Silva, Manuel T., 1461
Silverstein, Samuel C., 3893
Silvestri, Sergio, 1308
Simon, Markus M., 1711
Simonet, Michel, 841
Simon-Haarhaus, Birgit, 3671
Simpson, Linda M., 1769
Simpson, W. A., 2906
Simpson, Warren J., 847
Sinclair, Stephen B., 1821
Sinden, Robert E., 2834
Singh, Aruna, 1301
Sinos, Christos, 4089
Siu, P., 711
Sjöbring, Ulf, 1217
Sjölander, Anders, 854
Skamene, Emil, 1210
Skerlavaj, Barbara, 3724
Skurnik, Mikael, 2245
Sletten, Knut, 272
Smets, Pierre, 2828
Smith, Jane I., 3056
Smith, Jeffrey G., 1572
Smith, Noel H., 1891, 2262
Smith, Peter, 3640
Smith, R., III, 879
Smith, Roberta, 3407
Smoot, Duane T., 1992
Smorodinsky, N., 1129
Snodgrass, Terri L., 1802
Snyder, Irvin S., 822, 1951, 1959
So, Magdalene, 3217
Soberay, Annelle H., 515
Soboh, Fouad, 2005
Soderberg, Lee S. F., 2599
Sohnle, Peter G., 2696
Sokolovic, Z., 3582
Solomon, Scott, 3711
Soltis, Mary T., 1614
Songer, J. Glenn, 131
Sørensen, Anne Lund, 3163
Sory, Marie-Paule, 2420
Souto-Padrón, Thais, 586
Spann, Clayton L., 1402
Sparrius, M., 3954
Speert, David P., 1344
Spencer, Lyn K., 4004
Speranza, Filippo, 4153
Speziale, Pietro, 449
Spinola, Stanley M., 1558

Squires, Kathleen E., 3893
St. Geme, Joseph W., III, 4036
Stabel, Linda F. E. M., 80, 2821
Stabel, Thomas J., 2048
Stahl, Dorothea, 222
Ståhl, Stefan, 854
Staines, Norman A., 2156
Stamm, Walter E., 753, 3947
Stashak, Philip W., 726, 1261, 2862
Stashenko, K. P., 1290
Staugas, Rima E. M., 3996
Stebbins, Mark R., 3819
Steinbach, Suzanne, 471
Steiner, Bret M., 1685
Ste-Marie, Line, 2105
Stendahl, Olle, 37
Sterling, Charles R., 2071
Stevens, David A., 2628
Stevens, Marla K., 3430
Stevenson, Mary M., 3225
Stewart, David J., 1545
Stewart, N. P., 2171
Stibitz, Scott, 1004
Stiff, Mary I., 1496
Stine, D. L., 358
Stith, Rex D., 619
Stolarsky, T., 1396
Storkus, Walter J., 639
Storz, Johannes, 1379
Stover, Charles K., 1360, 2076
Straley, Susan C., 2569, 3262
Strecker, Gérard, 3537
Strittmatter, Wolfgang, 2008
Strömberg, Nicklas, 2555
Strugnell, Richard A., 1323
Struyvé, Marlies, 1355
Strykowski, Henri, 2105
Stuart, P. Michael, 3558
Stull, Susan J., 2637
Stull, Terrence L., 1600
Su, Chung J., 2017, 2669
Su, Hua, 1017, 2701
Subbarao, Bondada, 2035
Suckow, Mark A., 674
Suerbaum, Sebastian, 222
Sueyoshi, Masuo, 3348
Sugama, Kazushige, 3564
Sugimura, Kazuhisa, 2510, 3788
Sugita-Konishi, Yoshiko, 2929
Suhrbier, Andreas, 2834
Sullam, Paul M., 3802
Sun, Andrew N., 3770
Sun, Sung H., 2628
Sung, Lawrence M., 3959
Sunkel, Cláudio E., 1461
Surcel, H.-M., 2664
Suttorp, Norbert, 3796
Suykerbuyk, Marjon E. G., 80
Suzuki, Koichi, 4083
Suzuki, Kumiko, 2755
Suzuki, Motoyuki, 2510, 3788
Suzuki, Satoru, 2414
Suzuki, Yasuhiro, 3050
Svanborg-Edén, Catharina, 2056, 2361
Svennerholm, A.-M., 341
Svensbergh, Annkristin, 37
Swaminathan, B., 2792
Swancutt, Mark A., 384
Swanson, Albertina F., 502
Swartley, John S., 3594
Swihart, Kristin G., 1853, 1861
Sypek, Joseph P., 1146
Szeto, Lisa, 2585
Szklarek, Dorothy, 3899
Sztein, Marcelo B., 1114
Szu, Shousun C., 2309, 2367

Tabatabai, Louisa B., 2048, 2935
Taboda, D. C., 2198
Tachibana, Hiroshi, 955
Tacket, Carol O., 1620
Tagliabue, Aldo, 1308
Taha, Muhamed K., 4145
Taichman, Norton S., 1782
Takahashi, Ichiro, 289, 2929
Takahashi, Terumi, 1210
Takama, Kozo, 2414
Takamori, Kenji, 2856
Takashima, Tetsuya, 1369, 3286
Takayama, Kuni, 2862
Takazoe, Ichiro, 416
Takeda, Junji, 2535
Takeda, Tae, 2755, 3325
Takeda, Yoshifumi, 3568
Takehara, Tadamichi, 2882
Takeuchi, Hiroaki, 4083
Takeuchi, Tsutomu, 955
Talkington, Deborah F., 3293
Tall, Ben D., 1620, 2262, 3415
Tam, Mi Fong, 3225
Tam, Milton R., 1634
Tambini, Roberto, 4153
Tamura, Noboru, 1384
Tan, Tin-Wee, 3101
Tanaka, Atsushi, 536
Tanaka, Masako, 2139
Tanamoto, Ken-ichi, 217
Tange, Yoshiki, 887
Taniai, Madoka, 2510, 3788
Tarnok, Zuzsanna, 808
Tasaka, Hiromichi, 550, 4049
Taverne, J., 2923
Taylor, Christopher E., 2862
Taylor, Hugh R., 593, 3061
Taylor, Ronald K., 149, 3042
Templeton, J. W., 879
ten Berg, Rob, 2192
Tengowski, Mark, 1167
Terasaka, Kunihiro, 550, 4049
Thangaraj, Harry S., 1937
Theander, Thor G., 3163
Thole, Jelle E. R., 80, 1327
Thomann, Michael J., 674
Thomas, Connor J., 3129
Thomas, D. Denee, 581
Thomas, Virginia, 680
Thomas, W. R., 1909
Thompson, Michael R., 3020
Thornton, David J., 1489
Thornton, Scott A., 2686
Tiesjema, Rudy H., 3036
Tilley, Michael, 252, 2966
Timmis, Kenneth N., 3015
Timms, P., 2171
Timoney, John F., 3116
Tinge, Steven A., 3084
Tissi, Luciana, 3093
Titus, Richard G., 3863
To, Sam C.-M., 903
Tolson, Douglas L., 3500
Tomai, Mark A., 427
Tomana, Milan, 1186, 3073
Tommassen, Jan, 1355, 3036
Tong, Anna, 4149
Torian, Bruce E., 753, 1634
Torre, Donato, 4153
Toth, Istvan, 1223
Totsuka, Masayoshi, 4049
Toye, Baldwin, 3909
Toyoshima, Kuniaki, 2882
Tredgett, Michael W., 1489
Trevino, Norberto, 3941
Trifillis, Anna L., 1281
Tronchin, Guy, 48
Troye-Blomberg, Marita, 2989
Truong, Luan D., 4055
Trust, Trevor J., 2686
Tsang, M., 711
Tsuboi, Ryoji, 2856
Tsukada, Hiroki, 3973
Tsuyuguchi, Izuo, 1369, 3286
Tsuyuguchi, Takaichi, 1369
Tsuzuki, Kayo, 3173
Tu, Jeremy, 1344
Tudor, John J., 838
Tufano, Maria Antonietta, 3183
Turck, Christoph W., 2404
Turco, Jenifer, 3279
Turco, Salvatore J., 3500
Turcotte, R., 3531
Turner, J. Scott, 3293

Uchiyama, Takehiko, 3877
Ueta, Chisato, 3286
Uhlén, Mathias, 854
Uhlenbruck, Gerhard, 3143
Uitto, Veli-Jukka, 347
Ulczak, O., 1971
Ullberg, Måns, 21
Ullmann, Agnes, 3242
Ulmer, Artur J., 808
Ulrich, J. Terry, 726
Ungar, Beth L. P., 961
Upton, Steve J., 252, 2966
Urban, Robert G., 3645

Vadhan-Raj, Saroj, 3002
Vaerman, Jean Pierre, 2420
Valentin-Weigand, Peter, 3015
Valone, Frank H., 3802
van Alphen, Loek, 3807
Van Damme, Jo, 32
van de Merwe, Joop P., 523
van den Bosch, J. F., 740
Vandenbroucke-Grauls, Christina M. J. E., 26
van der Drift, Abraham, 2177
van der Meide, Peter H., 3225
van der Sluis, Jaap J., 2011
Van derVieren, Monica, 427
van der Zeijst, Bernard A. M., 2177
Van De Verg, Lillian, 2002
van Embden, Jan D. A., 2011
van Furth, Ralph, 3319
van Kleef, Ronald, 523
van Kooten, Cees, 2056
Vann, Willie F., 2309, 2367
van Rens, Ria M., 2821
van 't Wout, Jan W., 3319
Van Vooren, Jean-Paul, 2192
van Zijderveld, Ank M., 1870
van Zijderveld, Fred G., 801, 1870
Varesio, Luigi, 1073
Vartivarian, Shahe, 2715
Vasil, Adriana I., 4020
Vasil, Michael L., 4020
Vasilakos, John P., 1496
Ventur, Y., 1500
Verhagen, Elly, 3036
Verhoef, J., 421
Verhoef, Jan, 26
Vermeij, Paul, 1355
Verweij-van Vught, A. M. J. J., 3954
Vial, Kathleen, 753
Vidor, E., 4076
Vierbuchen, Mathias, 3143
Villa, Luigi, 1308
Visai, Livia, 449
Vishwanath, Suryanarayanan, 646
Vismara, Daniela, 245
Vitale, Laura A., 3856
Vogel, Stefanie N., 2397, 2429
Voirol, M.-J., 439
von Hunolstein, Cristina, 3093
von Specht, Bernd-Ulrich, 2241
Vordermeier, Hans-Martin, 2719
Vuillez, Jean-Philippe, 214
Vuopio-Varkila, Jaana, 1691

Wachsmuth, I. Kaye, 1223
Wachtel, John S., 263
Wada, Yumiko, 2510
Wadolkowski, Elizabeth A., 2438, 3959
Wadsworth, Elsa, 909, 1552
Waggie, Kimberly S., 1010
Wagner, Wilma, 3217
Wåhlin, Birgitta, 854, 2815
Waites, K. B., 3487
Waldman, Scott A., 1817
Walker, Anna N., 412
Wallach, David, 3168
Wallach, Michael, 557
Wallich, Reinhard, 1711
Walmrath, Dieter, 2659
Walsh, Thomas J., 1552
Waltman, W. Douglas, II, 3293
Wang, Enze, 2738
Wang, S.-Z., 480
Wang, Xia, 2745
Wanke, Christine A., 794, 1337
Wannemuehler, Michael J., 88, 2048
Ward, Colin W., 1545
Ward, S., 611
Warren, H. Shaw, 2375
Warren, John W., 1120, 1281
Washburn, Ronald G., 3508
Wasserman, Steven S., 2002
Watanabe, Haruo, 3325
Watkins, Nancy G., 646, 1017
Watson, David A., 3135, 3871
Watson, Douglas, 2309
Watson, Harold L., 3679
Wattiau, Pierre, 2840
Wauters, Georges, 2983

Webb, David R., 2404
Webster, Paul, 1828
Wecke, Jörg, 197
Weckesser, Jürgen, 3743
Weidanz, William P., 2946
Weikel, Cynthia S., 1402
Weinberg, A., 1720
Weiser, Jeffrey N., 3455
Weiss, Alison Ann, 3445
Welch, Rodney A., 822, 828, 1853, 1861, 1951, 1959
Welham, Deborah A., 3856
Welin, Agneta, 3178
Welkos, Susan L., 303
Wellhausen, Samuel R., 1577
Wells, David J., 228
Wennerås, C., 341
Wessel, Klaus, 3168
Wheat, R. W., 179
Whelan, William L., 1552
Whipp, Shannon C., 930, 3645
White, David G., 3613
White, Elizabeth H., 1223
White-Ziegler, Christine A., 3903
Whittam, Thomas S., 1891, 3613
Whittle, Hilton C., 2989
Whittum-Hudson, Judith, 3061
Wichlan, David G., 3194
Wick, Mary Jo, 1133
Widders, Phillip R., 944, 3078
Wiederanders, Bernd, 1730
Wieles, Brigitte, 2011
Wiker, Harald Gotten, 272
Wilkins, T. D., 480
Williams, Alun, 3455
Williams, Dwight M., 1572
Williams, Kristina M., 1774
Williams, P. H., 761
Williams, R. O., 3847
Williamson, E. Diane, 2487
Wilson, Richard A., 471, 3613
Wiman, Björn, 21
Wing, Edward J., 2313
Winger, Larry A., 2834
Winkler, Herbert H., 3279
Winston, Scott, 189
Winter, A. J., 254
Winters, Mark A., 495
Wise, Kim S., 2637
Wisnieski, Bernadine J., 2644
Witkin, Steven S., 260
Witvliet, Maarten H., 4063
Wnek, Andrew P., 3109
Wold, Agnes E., 3073
Wolf, Judith E., 1296
Wolf, Marcia K., 1124
Wolf-Watz, Hans, 3731
Wong, Amy C. Lee, 1026
Wong, Brian, 283, 1664
Wong, Catalina, 2165
Wonigeit, Kurt, 1584
Wood, Patrick K., 2470
Woodmansee, D. B., 2237
Woods, Jon P., 569
Woods, Marion L., II, 719
Woodward, Jerold G., 3558
Woodward, Martin J., 801
Wozencraft, Anne O., 2156
Wright, Andrew, 320
Wright, Anita C., 1769, 2470, 2706
Wright, Kathleen A., 1664
Wright, Samuel D., 2951, 4069
Wu, Hongyin, 3545
Wyler, David J., 1146
Wyrick, Priscilla B., 835

Yacoob, Reza K., 3653
Yagawa, Katsuro, 536, 1647
Yakushiji, Tsuyoshi, 163
Yamada, Takeshi, 550, 4049
Yamaguchi, Ryuji, 550, 4049
Yamamoto, Koichiro, 2706, 4106
Yamamoto, Koshi, 2510, 3788
Yamashita, Katsumi, 2621
Yamashita, Yoshihisa, 2882
Yamazaki, Akihiro, 550, 4049
Yamazaki, Mikiko, 2882
Yan, Xiao-Jie, 3877
Yang, Liying, 2738
Yang, Xiao-He, 2214
Yao, Fei-Long, 3653
Yarus, Sinai, 557
Yasuda, Hiroshi, 2502
Yee, E., 1476
Yen, T. S. Benedict, 3816
Yerushalmi, Z., 1129
Yogev, Ram, 2343
Yohe, Herbert C., 2888
Yokosawa, Noriko, 3173
Yoneda, Masahiro, 406, 2621
Yoshida, Takeshi, 1210
Yoshiike, Takashi, 2856
Yother, Janet, 3293
Young, Jim, 2995
Yuan, Ying, 2701, 2850
Yukitake, Hideharu, 4049

Zafriri, Dina, 3737
Zaidi, Tanweer S., 114
Zalisz, Rene, 2828
Zambon, Joseph J., 3394
Zealey, Gavin R., 3653
Zhang, You-Xun, 205, 1017, 2850
Zhao, Ying, 1408
Zheng, Hong, 1408
Zhong, Guangming, 1450, 3438, 3909
Zhou, Wei-Wei, 3009
Zhu, Shiwen, 179
Ziegler, H. Kirk, 2792, 3601
Zlotnick, Gary W., 3388
Zobrist, Gloria J., 3653

SUBJECT INDEX
VOLUME 58

ABO blood group
  antigenic determinants, 3966
  cholera toxin binding, 3966
  mucins, 3966
Acquired immunodeficiency syndrome
  M. avium complex
    colonial variants, 2564
Actinobacillus actinomycetemcomitans
  B-cell immunoglobulin production, 3856
  cations, 1782
  immune suppression, 3856
  leukotoxin
    cytolytic activity, 1782
  leukotoxin gene
    alpha-hemolysin/leukotoxin gene family, 920
    sequence, 920
  osmotic protectants, 1782
Actinobacillus pleuropneumoniae
  adherence
    porcine tracheal rings, 3523
  hemolysin
    immunization, 3829
  humoral antibody response, 3829
  immunity
    protective, 3829
  immunization, 3829
  lipopolysaccharides, 3523
  vaccination
    cell extract, 358
Actinomyces
  coaggregation
    cellular, 163
    S. milleri, 163
  S. milleri, 163
Actinomyces naeslundii
  coaggregation
    adhesin mediated, 3064
    S. gordonii, 3064
Actinomyces viscosus
  binding
    salivary proline-rich proteins, 1986
  fimbriae
    binding of salivary proline-rich proteins, 1986
    type 1, 1986
  salivary proteins
    binding, 1986
    proline rich, 1986
Adenylate cyclase
  B. pertussis, 1195, 3242, 3621, 3759
    colonization, 3445
  deletions, 3242
Adherence
  A. pleuropneumoniae, 3523
  C. albicans, 1902
  Campylobacter isolates, 1101
  corneas
    mouse, 1301
  E. coli
    avian strains, 1129
    O78, 1129
    O157:H7, 1223
    renal tubular cells, 3434
  epithelial cells, 4036
    respiratory, 2578
  fibrin thrombi, 3015
  fibrin-platelet clots, 315
  fibronectin, 3924
  fibronectin mediated, 3015
  H. influenzae, 4036
  HeLa cells, 1634
  HEp-2 cells, 1101
  lipoteichoic acid, 315
  monoclonal antibodies, 1634
  mutans streptococci
    oral bacteria, 1738
  oral bacteria, 1738
  P. aeruginosa, 1301
  P. cepacia, 2578
  pili, 1129
  plasmids, 1223
  S. epidermidis, 315
  S. mutans cell surface protein antigen mutants, 289
  streptococci
    group A, 3015
    group C, 3015
  T. denticola, 3924
  T. vaginalis motility, 1634
  tissue culture cells, 3737
  toxicity
    enhanced, 3737
  toxin inhibitors, 3737
Adherence factors
  E. coli
    diarrheagenic, 1106
    enteropathogenic, 1106
  HeLa cells, 1106
  HEp-2 cells, 1106
Adherent bacteria
  tissue culture cells, 3737
  toxicity
    enhanced, 3737
  toxin inhibitors, 3737
Adhesins
  afimbrial
    AFA-I, 279
    AFA-III, 279
  C. trachomatis
    outer membrane protein, 1017
  Dr receptor recognition, 279
  E. coli, 1995, 2133
    diarrhea associated, 279
    mannose resistant, 1500
    uropathogenic, 279
  fimbriae
    type 1, 1995
  FimH protein, 1995
  H. parainfluenzae, 3833
  M. pneumoniae
    epitope, 2464
  mannose specific, 1995
  mediator release
    basophils, 1500
    lymphocytes, 1500
    monocytes, 1500
    polymorphonuclear granulocytes, 1500
  N. subflava, 2555
  outer membrane protein, 3833
  SfaS, 2133
  Sia-1, 2555
  sialic acid binding, 2133
Adhesion
  buccal epithelial cells, 124
  Caco-2 cells, 893
  Candida spp., 2005
  E. coli, 98
    diarrheic rabbits, 2690
    enterotoxigenic, 893
  epithelial cells, 2005
  HeLa cells, 2690
  nonoxynol-9, 2005
  P. aeruginosa, 124
  villi
    intestinal, 2690
Adjuvants
  antibody enhancement, 427
  IFN-γ, 427
ADP-ribosyltransferase
  monoclonal antibodies, 746
  pertussis toxin activity, 746
Aerolysin
  A. sobria, 2127
  ion-permeable channel, 2127
  S. aureus alpha-toxin, 2127
Aeromonas sobria
  aerolysin
    ion-permeable channels, 2127
  S. aureus alpha-toxin, 2127
Aeromonas strains
  diarrhea, 1924
  intestinal invasiveness, 1924
  removable intestinal tie rabbit model, 1924
AF/R1 pilus genes
  cloning, 1124
  E. coli
    enteroadherent, 1124
  subunit, 1124
Aggregation
  S. mutans cell surface protein antigen mutants, 289
Alginate
  cystic fibrosis sputum, 3363
  inflammatory response, 3363
  oxygen-dependent up-regulation, 1344
  P. aeruginosa, 1344, 3363
Alkaline phosphatase
  B. gingivalis, 2882
Alkaline phosphatase fusion protein
  E. coli, 3645
  heat-stable enterotoxin STb, 3645
Alkaline protease structural gene
  P. aeruginosa, 4083
Alveolar macrophages
  chlamydicidal activity, 3540
  human, 3640
Amniotic cells
  C. trachomatis
    growth cycles, 2042
  human, 2042
Amphotericin B
  macrophage oxidative burst activity
    in vivo activation, 1296
Anaerobiosis
  Hep-2 cell invasion, 2014
  S. typhimurium, 2014
Anaplasma marginale
  persistent infection, 1117
  rickettsemia
    cyclic, 1117
Ancylostoma hookworm larvae
  ecdysis, 3883
  metalloproteases, 3883
  tissue invasion, 3883
Anthrax
  immunization
    anthrax protective antigen, 303
    B. anthracis aromatic compound-dependent mutants, 303
    B. subtilis recombinants, 303

Antibiotics
D-arabinitol
serum, 283
urine, 283
C. albicans, 283
Antibodies
adjuvants, 427
alternative bovine complement pathway, 944
antigenic mimicry, 680
anti-idiotypic, 766, 1932, 2487, 2815
polyclonal, 680
anti-O, 1421
antipeptide, 2727
B. pertussis
filamentous hemagglutinin, 2523
bovine, 2966
C. neoformans
capsular polysaccharide, 1914
isotype-switch variant, 1914
C. parvum, 2966
C. perfringens, 2487
colostral, 2966
DNA binding, 2156
H. influenzae, 914, 3272
Hi-PAL, 3272
IFN-γ, 427
invasion inhibition, 2815
K. pneumoniae, 1421
M protein
streptococcal, 774
M. bovis BCG
culture filtrate antigens, 2192
M. leprae, 1327
N. meningitidis
lipooligosaccharide antigens, 2204
natural killer cells, 639
P. aeruginosa, 2727
P. falciparum
Pf155/RESA, 2815
sporozoite surface antigens, 2995
phosphorylase cross-reactive, 774
pili
PAK, 2727
PAO, 2727
S. dublin aroA vaccine strains, 2523
S. pneumoniae
capsule, 3871
serum factor-induced resistance, 914
T. foetus
killing, 944
T. gondii, 2446
Antibody responses
diphtheria toxoid, 2309
polysaccharide antigens, 3465
S. pneumoniae type 12F polysaccharide, 2309
serum, 2309
T cells, 3465
T. gondii, 1240
thymus-independent antigens
hilar lymph nodes, 2035
lungs, 2035
Antigen processing
L. monocytogenes
hemolysin producing, 3601
macrophage mediated
inhibition, 3601
Antigen-liposomes
L. major, 3233
leishmaniasis
cutaneous, 3233
protective, 3233
Antigens
α
cross-reactive, 550
anthrax protective, 303
antibody response
magnitude, 3465
B. bronchiseptica, 352
B. burgdorferi, 1711, 2186
B. coriaceae
chromosomal DNA, 1744
linear plasmid DNA, 1744
B. piliformis, 1010
bacterial, 1774
β, 332
C. albicans
form specific, 378
hyphae, 625
C. immitis, 169, 179
C. parvum, 2966
C. pneumoniae, 93
CD, 3877
cross-reactivity, 1774
E. coli
avian, 740
E. histolytica, 955, 3941
nonpathogenic isolates, 753
pathogenic isolates, 753
E. maxima, 557
F. tularensis, 2664
flagellin, 1711
H. influenzae, 1909
heat shock proteins, 2186
human leukocyte, 3765
class I, 1774
integral membrane protein, 753
interleukin-2 receptor, 3847
L. monocytogenes
T-cell-reactive proteins, 2792
L. pneumophila, 3380
M. avium complex
monoclonal antibodies, 1445
M. bovis BCG
culture filtrate, 2192
M. intracellulare, 17
M. kansasii, 550
M. leprae, 80, 1327, 1937, 2821
monoclonal antibodies, 3078
mycobacterial antigen 85 complex
genes, 272
P. berghei
sporozoites, 2834
P. endodontalis, 2542
P. falciparum, 2923
sporozoite surface, 2995
polysaccharide, 3465
R. rickettsii, 2760
R. tsutsugamushi, 2076
S. mutans group, 2276
S. sobrinus SpaA, 2276
Sta56, 2076
stage-specific embryonic antigen 4, 4055
streptococci
group B, 332
superantigens, 2409
superoxide dismutase, 1937
T cells, 2664, 3465, 3847, 3877
T. cruzi, 1437
culture supernatants, 1812
T. foetus, 3078
T. gondii, 1240, 2446
T. parva
sporozoites, 1828
Tac, 3847
thymus independent, 2035
tube precipitin, 179
tube precipitin antibody reactive, 169
U. urealyticum, 3679
Y. pestis, 2569
Anti-idiotypic antibodies
antigenic mimicry, 680
anti-lipid A monoclonal antibody
E. corrodens lipopolysaccharide, 416
C. perfringens, 2487
E. coli type 1 fimbrial proteins, 680
E. corrodens
lipid A, 416
immunization
lipopolysaccharide, 416
invasion inhibition, 2815
liposomes, 1932
P. falciparum
Pf155/RESA, 2815
polyclonal, 680
syphilis
experimental, 766
Anti-inflammatory agents
mucosal inflammation
gram-negative bacteria, 2056
Antiphagocytic effect
S. simulans capsule, 1350
Arabinitol
D-arabinitol
serum, 283
urine, 283
C. albicans, 283
dietary, 283
Arachidonic acid cascade products
monkeys, 3494
S. aureus enterotoxin B, 3494
Arginine deiminase
M. arginini, 2510
Arginine deiminase gene
cloning, 3788
M. arginini, 3788
sequence, 3788
aroA mutants
B. pertussis, 732
Arthritis
chronic, 523
Eubacterium spp.
cell wall fragments, 523
intestinal flora, 523
Lyme, 144, 2404
S. agalactiae, 3093
septic, 3093
Aspergillosis
DBA/2N mice, 1476
pulmonary, 1476
systemic, 1476
Aspergillus flavus
proteinase
elastinolytic, 2529
Aspergillus fumigatus
cell wall antigens
monoclonal antibodies, 2105
complement inhibitor, 3508
monoclonal antibodies
cell wall antigens, 2105
Attaching effacement
E. coli O111
enteropathogenic, 1316
enterocyte brush border
rabbit, 1316
plasmid encoded, 1316

B cells
A. actinomycetemcomitans
immune suppression, 3856
C3H/HeJ mice, 2888
ganglioside accessibility, 2888
immunoglobulin production, 3856
membrane architecture, 2888
P. aeruginosa, 808
pyocyanine, 808
T. brucei variant surface glycoprotein epitopes
T-cell-dependent responses, 2337
T-cell-independent responses, 2337
Babesia bovis
clones, 2171
vector transmission, 2171
virulence, 2171
Babesia divergens
gerbils, 4076
polypeptides
protective, 4076
Bacillus anthracis
aromatic compound-dependent mutants, 303
baculovirus, 366
immunization, 303
lethal toxin
lethal factor component, 1606
monoclonal antibodies, 1606
protective antigen gene
cloning, 366
viral expression, 366
vaccinia virus, 366
Bacillus cereus
hemolysin
bicomponent, 2214, 2220
Bacillus piliformis
antigenic heterogeneity, 1010
protein heterogeneity, 1010
Bacillus subtilis
anthrax immunization, 303
anthrax protective antigen, 303
recombinant strains, 303
Bactenecins
bactericidal mechanisms, 3724
gram-negative bacteria, 3724
Bacterial infection
containment, 1807
Bacteriocins
E. faecalis, 3914
H. influenzae, 1600
haemocin, 1600
Bacteriophages
λgt11
clones, 1328
recombinant, 17
T. parva sporozoite antigenic determinants, 1828
M. intracellulare antigens, 17
sezA$^+$ gene, 1614
staphylococcal variant enterotoxin gene silent, 1614
Bacteroides fragilis
heme uptake, 3954
outer membrane protein
iron regulated, 3954
Bacteroides gingivalis
alkaline phosphatase
characterization, 2882
purification, 2882
antigen, 2785
polymorphonuclear leukocytes
bactericidal activity, 406
human, 406
T helper cell clones, 2785
Bacteroides nodosus
pilins
B serogroup, 1545
Baculovirus
B. anthracis protective antigen gene, 366
BALB/c mice
S. typhimurium mutants
flagellar, 137
nonmotile, 137
virulence, 137
Basement membrane
T. denticola
chymotrypsinlike protease, 347
migration, 347
B-cell stimulatory factor 2
macrophage antibacterial activities
stimulation, 269
Bcg gene
granulomas
foreign body, 1210
M. bovis, 1210
mice, 1210
regulation, 1210
Beagles
gnotobiotic, 2606
H. pylori gastric infection, 2606
Binding
A. viscosus type 1 fimbriae
salivary proline-rich proteins, 1986
C. fetus, 2738
C. jejuni
eucaryotic cells, 1749
calcium requirements, 1951
cholera toxin, 3966
collagens, 449
corneal epithelium
rabbit, 114
E. coli
enteropathogens, 794
enterotoxigenic, 449
pilated, 868
serotype O157:H7 strain CL-49, 860, 868
E. coli hemolysin
calcium, 1959
erythrocyte membranes, 1951, 1959
glycosphingolipids
neutral, 114
immunoglobulin A, 1789
lectin mediated, 2738
leukocytes, 2951
M. avium-M. intracellulare complex, 2951
monophosphoryl lipid A, 726
mucin
intestinal, 860, 868
"link" glycopeptide, 868
small bowel, 794
P. aeruginosa, 107, 114
platelets, 3802
streptococci
type II group B, 1789
viridans group, 3802
T cells
suppressor, 726
T. cruzi, 1
transferrin, 2972
Blastogenesis
Kupffer cells, 2313
L. monocytogenes, 2313
T cells, 2313
Bordetella bronchiseptica
antigen
major protective, 352
outer membrane protein, 352
Bordetella parapertussis
heat-labile toxin
exogenous agents, 1456
guinea pig skin, 1456
inhibition by fatty acids, 4045
Bordetella pertussis
adenylate cyclase, 3445, 3621, 3759
deletions, 3242
hemolytic activity, 3242
secretion, 1195
synthesis, 1195
toxin activity, 3242
aroA mutants, 732
colonization, 3445
filamentous hemagglutinin
antigenic analysis, 2895
colonization factor, 7
protective antigen, 7
filamentous hemagglutinin gene
cloning, 2895
sequence, 2895
HeLa 229 cell invasion
inhibition, 3187
HeLa cell invasion assay
genetic alteration, 2516
inhibitors, 2516
phenotypic modulation, 2516
hemagglutinin
filamentous, 7, 2523
S. dublin aroA vaccine strains, 2523
lethal infection, 3445
mouse respiratory infection model, 7
pertussis toxin, 3445
pertussis toxin B oligomer, 4063
phorbol myristate acetate, 3187
respiratory infection
protection, 4063
vaccines, 2523
Borrelia burgdorferi
antigen
flagellum associated, 1711
arthritis, 144, 2404
DNA sequences
plasmid associated, 847
repeated, 847
species specific, 847
flagellin
cloning, 1711
gene amplification, 1711
hamsters
LSH, 144
heat shock protein antigens, 2186
heat shock response, 2186
immunization
passive, 144
lipoproteins, 983
protein synthesis
thermoregulation, 1038
proteins
immunogenic, 983
integral membrane, 983
lipoproteins, 983
synovial fluid antibody reactivity, 2404
Borrelia coriaceae
antigens, 1744
DNA
chromosomal, 1744
linear plasmid, 1744
plasmids

linear, 1744
Boutonneuse fever
vaccine
recombinant *R. conorii*, 646
Bovine colostrum
C. parvum sporozoite neutralization, 257
immune, 257
Bovine serum
C. parvum sporozoite neutralization, 257
immune, 257
Bronchoalveolar lavage cells
S. mansoni
larvicidal activity, 3903
Brucella abortus
Cu-Zn superoxide dismutase, 2935
intracellular survival
in vitro, 879
lipopolysaccharide
antigenic relationships, 1391
mononuclear phagocytes, 879
nonphagocytic cells
intracellular growth, 2320
penetration, 2320
phosphomonoesterase, 1153
protein
S. typhimurium recombinant plasmid, 2048
serum
immune, 254
T cells
immune, 254
Brucella melitensis
lipopolysaccharide
antigenic relationships, 1391
Brucella ovis
outer membrane proteins
antibody response, 489
Brucella spp.
Cu-Zn superoxide dismutase, 2935
monoclonal antibodies, 3980
outer membrane proteins
surface exposed, 3980
Buffaloes
T. parva, 3574

C3d
C. albicans
avirulent mutant, 909
receptors, 909
C3H/HeJ mice
B cells
gangliosides, 2888
membrane architecture, 2888
C3H/HeN mice
L. major, 4149
macrophage activation, 4149
C5a
chemotactic activity
inactivation, 1269
serratial protease, 1269
C57BL/6 *ep/ep* mice
euthymic, 3893
leishmaniasis
tissue cellular immune response defect, 3893
visceral, 3893
C57BL/10 mice
curing phenotype, 3151
cyclosporin A, 3151
L. donovani, 3151
noncuring phenotype, 3151
Caco-2 cells
adhesion, 893
E. coli
enterotoxigenic, 893
F-actin, 1048
L. monocytogenes
spread, 1048
V. cholerae virulence model, 3415
Calcium
E. coli hemolysin binding, 1959
erythrocyte membranes, 1951
Campylobacter cinaedi
pig-tailed macaques, 3947
Campylobacter coli
C. jejuni, 2149
flagellin genes, 2686
M. nemestrina, 2149
reinfection, 2149
Campylobacter fennelliae
pig-tailed macaques, 3947
Campylobacter fetus
lectin-mediated binding
type A lipopolysaccharide, 2738
surface array proteins, 2738
Campylobacter isolates
adherence, 1101
enteroviruses, 1101
HEp-2 cells, 1101
invasion, 1101
Campylobacter jejuni
C. coli, 2149
enteric disease, 1848
enterotoxin, 2414
eucaryotic cells
binding, 1749
ferret model of immunity, 1848
flagellar variants, 2214
flagellin genes, 2686
hamsters
Syrian, 2214
M. nemestrina, 2149
proteins
surface, 1749
reinfection, 2149
Candida acid proteinase
protein-supplemented cultures, 508
Candida albicans
adherence
mouse tissues, 1902
adhesion receptor, 2085
antigens
form specific, 378
hyphae, 625
surface, 625
D-arabinitol
serum, 283
urine, 283
avirulent mutant, 909
burned mice
virulence, 1527
C3d-binding protein
extracellular, 309
C. stellatoidea, 2804
cell surface mutants, 1552
cell wall
oligomannosidic residues, 3537
cell-mediated immunity, 107
coaggregation
S. sanguis, 1429
streptococci, 1429
delayed hypersensitivity suppressor cells
mannan induced, mannan specific, 2613
esophageal infection, 2228
fibrinogen increase, 2750
form-specific molecules, 378
Friend leukemia virus, 1796
gastrointestinal colonization
mice, 1514
model, 1514
sustained, 1514
germ tube formation, 260
GG2EE macrophage cell line
anti-*Candida* activity, 1073
α-glucosidase
sucrose inhibitable, 2804
gnotobiotic mice, 107
granulocytes, 3319
hepatic clearance, 2869
hydrophilicity
cell surface, 3469
hydrophobicity
cell surface, 3469
IFN-γ, 260, 1073
interleukin-1, 1073, 3319
kallikrein-kinin system
activation, 2139
plasma, 2139
killing, 2869
lactosylceramide, 2085
laminin receptors
germ tubes, 48
mannan composition, 2061
monoclonal antibodies
binding site recognition, 3765
human leukocyte antigens, 3765
monoclonal antibody, 625
Fab fragments, 3810
germ tube mannoprotein, 3810
mutants, 2804
avirulent, 2061
cell surface, 1552
hyphal form, 2061
mannans, 2061
neoglycolipids
immunoreactivity, 3537
neutrophils, 1174
candidacidal activity, 2696
candidastatic activity, 2696
oral infection, 2228
oxidants
in vitro, 1174
perfused mouse liver model, 2869
prostaglandin E_2, 260
proteinase, 2139
proteins
C3d binding, 309
proteolytic activity, 1527
protoplasts, 625
rats
hyposalivatory, 2228
receptors
C3d, 909
iC3b, 909
resistance
host, 3319
suppressor cells
delayed hypersensitivity, 2613
survival, 1174
phenotypic switching, 1174
tumor necrosis factor, 1073, 2750
yeast-to-mycelium transition
blockage, 3810
Candida spp.
adhesion
epithelial cells, 2005

nonoxynol-9, 2005
Candida stellatoidea
C. albicans mutant, 2804
chromosomes, 949
gene duplication, 949
genomic structure
extra chromosomes, 949
gene duplication, 949
α-glucosidase
sucrose inhibitable, 2804
type II, 2804
Candidiasis
D-arabinitol
serum, 283
urine, 283
DBA/2N mice, 1476
gastrointestinal, 283
mice
congenitally immunodeficient, 1093, 3813
gnotobiotic, 3813
mucosal, 1093
resistance, 3813
systemic, 1093, 1476
vaginal, 3813
Capsular polysaccharides
E. coli
K-1-positive blood culture isolates, 222
serum resistance, 222
Capsules
adhesive, 2710
antiphagocytic effect, 1350
C. neoformans growth inhibition, 1201
E. coli, 2710
polysaccharide, 2710
protein, 2710
S. pneumoniae, 3135
S. simulans, 1350
Carbohydrate
E. histolytica, 2389
mammalian cell membrane, 2389
Caries
human, 1628
microflora, 1628
root surface, 1628
Catalase
S. flexneri
pathogenesis, 529
Catecholamines
C. neoformans virulence, 2919
Cations
A. actinomycetemcomitans leukotoxin cytolytic activity, 1782
CD2 pathway
peripheral blood lymphocytes
activation, 1114
human, 1114
T. cruzi, 1114
Cecum
ligation and puncture, 619
sepsis, 619
Cell-mediated immunity
C. albicans-colonized gnotobiotic mice, 107
Cerebrospinal fluid
meningitis
cryptococcal, 2115
opsonic activity, 2115
Chagas' disease
immune sera, 1437
immunopathology, 3588
T cells
binding to heart tissue, 3588
T. cruzi antigens, 1437
Checkerboard immunoblotting
cholera enterotoxin-related enterotoxins
epitopes, 2352
Chitin
P. carinii, 412
Chlamydia pneumoniae
antigenic analysis, 93
primates
nonhuman, 593
proteins, 93
structural analysis, 93
Chlamydia psittaci
chlamydial genital infection
immunization, 2599
elementary bodies
outer membrane proteins, 1379
muramic acid, 835
*omp*1
multiple tandem promoters, 2850
outer membrane proteins
antibody response, 1379
elementary bodies, 1379
epitopes, 1379
vaccine, 3101
sheep
protection, 3101
vaccine
major outer membrane protein, 3101
subcellular, 3101
Chlamydia spp.
lectin-binding proteins, 502
proteins
lectin binding, 502
RNA synthesis
developmental cycle specific, 3194
host free, 3194
Chlamydia trachomatis
adhesin
outer membrane protein, 1017
alveolar macrophages
killing activity, 3640
amniotic cells, 2042
DnaK-like protein, 2098
E. coli groE stress response operon, 2701
enucleated cells, 3816
growth, 3816
growth cycles
human amniotic cells, 2042
growth inhibition, 3168
heat shock protein 70 family, 189
heat shock proteins, 3061
host cell interactions, 1017
host defense, 1572
hyp operon, 2701
L2 polypeptide
cytoplasmic, 2098
lymphogranuloma venereum biovar
neutralization by immune sera, 938
muramic acid, 835
oculogenital serovars
virulence, 2021
outer membrane protein
adhesin, 1017
antigenic sites, 1450
immunoaccessible peptide sequences, 3438
immunologic characterization, 3909
major, 1450, 3438, 3909
species-specific epitope, 3909
prostaglandin synthesis, 3168
protein
75 kilodalton, 189
proteins
early, 2478
trachoma, 3061
trachoma biovar
neutralization by immune sera, 938
tumor necrosis factor, 3168
tumor necrosis factor alpha, 1572
virulence, 2021
Chlamydiae
endocytosis
cytochalasin D resistant, 3208
pinocytic mechanisms, 3208
Chlamydial lipopolysaccharide
monoclonal antibodies, 205
polyclonal antibodies, 205
Cholera toxin
ABO blood group antigenic determinants, 3966
B subunit, 2420
β-subunit gene fusion, 70
binding
inhibition, 3966
checkerboard immunoblotting, 2352
chimeric protein, 70
enterotoxins
epitopes, 2352
related, 2352
gene fusion, 70
glycopeptides
pig gastric mucin derived, 3966
T cells
activation, 3711
Y. enterocolitica
immunization, 2420
Cholera toxin genes
cloning, 4142
CtxA$^-$ strain, 4142
sequence, 4142
Clindamycin
staphylococci
macrophages, 197
wall degradability, 197
Clones
B. bovis, 2171
M. leprae antigens, 2821
Salmonella serovars, 2262
T helper cell, 2785
Cloning
AF/R1 pilus genes, 1124
B. anthracis
protective antigen gene, 366
B. burgdorferi flagellin gene, 1711
B. pertussis filamentous hemagglutinin gene, 2895
Brucella spp.
Cu-Zn superoxide dismutase, 2935
C. botulinum hemagglutinin
main component, 3173
C. pseudotuberculosis, 131
cholera toxin genes, 4142
damselysin gene, 266
E. coli, 131, 903, 970, 1124, 1558
E. rhusiopathiae protective antigen, 3116
enterotoxins
STb, 970
fructose-1,6-diphosphate-dependent L-(+)-lactate dehydrogenase gene, 1290
H. influenzae
2-keto-3-deoxyoctulosonic acid epitope, 1558

lipooligosaccharide synthesis gene(s), 1558
nontypeable, 903
pilin gene, 1065
L. monocytogenes
T-cell-reactive protein antigens, 2792
LKP pilus genes, 903
M. kansasii
α-antigen gene, 550
phospholipase D gene, 131
R. tsutsugamushi, 1360, 2076
S. mutans, 1290
*sta*56, 2076
Sta58 major antigen gene, 1360
T. pallidum subsp. *pallidum*
endoflagellar genes, 1697
tetanus toxin fragment C, 1004
V. cholerae
heat-stable enterotoxin gene, 3325
V. damsela, 266
Cloning vectors
E. coli
segregation, 1141
intestine
large, 1141
mouse, 1141
streptomycin treated, 1141
stable, 1141
Clostridium botulinum
hemagglutinin-main-component gene
cloning, 3173
sequence, 3173
Clostridium difficile
toxin A
cytopathologic effects, 2329
interaction with cultured cells, 2329
toxin A gene, 480
Clostridium perfringens
anti-idiotypic antibody, 2487
enterotoxin
complex formation, 3109
cytotoxicity, 3109
proteolysis, 1999
temperature, 3109
type A, 1999
protection, 2487
Coaggregation
A. naeslundii, 3064
actinomyces, 163
C. albicans, 1429
cellular, 163
S. gordonii, 3064
S. milleri
oral, 163
S. sanguis, 1429
streptococci, 1429
Coccidioides immitis
antigens
tube precipitin, 179
tube precipitin antibody reactive, 169
tube precipitin antibody-reactive fractions, 169
tube precipitin antigen
composition, 179
immunolocalization, 179
serologic reactivity, 179
Coli surface antigens
colonization factor antigen II, 341
E. coli
colonization, 341
enterotoxigenic, 341
protective immunogenicity, 341
Colibacillosis
experimental, 98
glycoprotein glycans, 98
treatment, 98
Collagens
binding, 449
E. coli
enterotoxigenic, 449
Colonization factor antigens
CFA/I
pilin expression, 874
rns-like regulatory gene, 874
CFA/II
coli surface antigens, 341
E. coli, 3442
rns homologs, 3442
Colonization factors
E. coli, 1471
intestine
large, 1471
mouse, 1471
streptomycin treated, 1471
Colony-stimulating factors
bone marrow macrophage proliferation, 3558
granulocyte
antibiotics, 2502
recombinant, 1647
therapeutic efficacy, 2502
granulocyte-macrophage, 3002, 3558
membrane-fluidizing agents, 3002
mycoplasmas, 3558
neutrophils
phenotype, 1647
superoxide anion generation, 1647
P. aeruginosa, 2502
polymorphonuclear leukocytes, 3002
Complement
alternative bovine pathway, 944
antibody, 944
inhibition, 2535
streptococcal M protein, 2535
T. foetus
killing, 944
Complement inhibitor
A. fumigatus, 3508
Conjunctivitis
Y. enterocolitica virulence plasmid gene locus, 2470
Containment
bacterial infection
nonspecific enhancement of defenses, 1807
Convertases
C3
alternate, 2535
C5
classical, 2535
inhibition, 2535
streptococcal M protein
group A, 2535
Corneas
mouse, 1301
P. aeruginosa
adherence, 1301
Cortisone acetate
D-arabinitol
serum, 283
urine, 283
C. albicans, 283
Corynebacterium pseudotuberculosis
cloning
E. coli, 131
phospholipase D gene, 131
phospholipase D gene
cloning, 131
Cryptococcus neoformans
adhesion receptor, 2085
antibodies
capsular polysaccharide, 1914
isotype-switch variant, 1914
capsule, 1201
catecholamines, 2919
cerebrospinal fluid
opsonic activity, 2115
culture surface, 1201
cytokines, 1201
delayed-type hypersensitivity response
amplification, 393
growth inhibition, 639, 1201
immunization
passive, 1919
immunodeficient beige athymic mice, 3300
lactosylceramide, 2085
D-mannitol
in vitro, 1664
meningitis, 1664
meningitis, 2115
rabbits, 1664
monoclonal antibodies
immunization, 1919
isotype-switch family, 1919
polysaccharide, 1919
monocytes
human, 1201
natural killer cells, 639
opsonins, 1201
opsonization, 1914
virulence, 2919
Cryptosporidiosis
animal model, 674
guinea pigs, 674
Cryptosporidium infection
immunodeficient hosts, 961
mouse models, 961
Cryptosporidium parvum
antibodies
bovine, 2966
colostral, 2966
antigens
oocyst, 2966
sporozoite, 2966
bovine colostrum
immune, 257
bovine serum
immune, 257
calf resistance
age, 2237
previous exposure, 2237
immunoglobulins
bovine colostral, 2962
immunotherapeutic efficacy, 2962
monoclonal antibodies, 257
proteins
sporozoites, 2071
sporozoite neutralization
kinetics, 257
sporozoite proteins
isolate specific, 2071
Cryptosporidium spp.
proteins
outer oocyst wall, 252
Culture surface
C. neoformans growth inhibition, 1201

Cutaneous air pouches
macrophages, 297
neutrophil accumulation
lipopolysaccharide induced, 297
tumor necrosis factor, 297
Cu-Zn superoxide dismutase
Brucella spp., 2935
Cyclic amphipathic peptides
Vero cytotoxin
glycolipid-binding specificity, 1532
Cyclic GMP
E. coli heat-stable enterotoxin, 1402
phorbol esters, 1402
T84 cells, 1402
Cyclosporin A
C57BL/10 mice
curing phenotype, 3151
noncuring phenotype, 3151
L. donovani, 3151
Cystic fibrosis
alginate, 3363
inflammatory response, 3363
P. aeruginosa, 3363
chemotactic properties, 1489
mucinophilic properties, 1489
sputum, 3363
Cytadhesin gene
M. pneumoniae, 2669
Cytochalasin D
chlamydial endocytosis, 3208
Cytokines
C. neoformans growth inhibition, 1201
induction, 3743
lipopolysaccharide, 2429
monophosphoryl lipid A, 2429
leishmaniasis, 3863
lipopolysaccharide, 3743
macrophage oxidative burst activity
in vivo activation, 1296
P. aeruginosa proteolytic inactivation, 3009
R. capsulatus lipopolysaccharide, 3743
secretion, 3863
Cytolysin gene
V. cholerae El Tor hemolysin gene, 2706
V. vulnificus, 2706
Cytolysin/hemolysin
V. cholerae, 4106
Cytolytic toxin
G. vaginalis, 3751
Cytotoxicity
T. foetus, 3627
Cytotoxin activity
H. pylori proteins
broth culture supernatants, 603
vacuolizing, 603
Cytotoxins
E. coli
enteroinvasive, 3717
Vero, 1532

Damselysin gene
cloning, 266
V. damsela, 266
DBA/2N mice
aspergillosis
pulmonary, 1476
systemic, 1476
candidiasis
systemic, 1476
Defensin resistance phenotypes
S. typhimurium phoP virulence regulon mutations, 3706
Defensins
bactericidal activity, 3934
gram-negative bacteria
facultative, 3934
oral, 3934
neutrophils, 3934
outbred rats, 3899
polymorphic expression, 3899
Delayed hypersensitivity suppressor cells
C. albicans, 2613
mannan induced, mannan specific, 2613
Delayed-type hypersensitivity
C. neoformans
amplification, 393
L. monocytogenes, 654
T-cell subsets, 654
Deltalike toxin
amino acid sequence, 1473
S. epidermidis, 1473
Delta-toxin
granulocytes
functions, 1653
leukotriene induction, 2678
platelet-activating factor
metabolism, 1653
polymorphonuclear granulocytes
metabolism, 2678
S. aureus, 1653, 2678
Diarrhea
Aeromonas strains, 1924
chick cecal model
swine dysentery, 3348
T. hyodysenteriae, 3348
Diphtheria toxin
intoxication pathway, 2644
killing, 2644
tumor necrosis factor alpha, 2644
Diphtheria toxoid
antibody response
serum, 2309
S. pneumoniae type 12F polysaccharide conjugate, 2309
DNA probes
syphilis, 2011
yaws, 2011
DNA-binding antibodies
kidney pathology, 2156
malaria, 2156

Eikenella corrodens
anti-idiotype antibody
anti-lipid A monoclonal antibody, 416
immunization
anti-idiotype antibody, 416
lipid A
monoclonal antibody, 416
lipopolysaccharide
lethal toxicity, 416
monoclonal antibody
lipid A, 416
Eimeria falciformis
T cells
depletion, 1496
effector function, 1496
Eimeria maxima
antigen
gametocyte, 557
immunization, 557
monoclonal antibody
gametocyte antigen, 557
Elastase
epithelium
alveolar, 433
permeability, 433
P. aeruginosa, 433, 4011
Encephalitis
IFN-γ
recombinant, 3050
treatment, 3050
T. gondii, 3050
Endocarditis
S. sanguis
virulence factors, 515
Endocytosis
chlamydiae, 3208
cytochalasin D resistant, 3208
Endoflagellar genes
cloning, 1697
T. pallidum subsp. *pallidum*, 1697
Endothelial cells
bovine, 1671
damage, 1671
E. coli hemolysin, 3796
P. haemolytica pathogenic factors, 1671
plasminogen activator, 2459
plasminogen activator inhibitor, 2459
pulmonary, 1671
R. conorii, 2459
R. rickettsii, 2459
Endotoxemia
K. pneumoniae
capsulated, 2828
lethal, 2828
monoclonal antibodies, 2828
protection, 2828
Endotoxins
hypersensitivity
S. typhimurium induction, 935
S. typhimurium, 935
Enolase
S. rattus, 1043
Entamoeba histolytica
antigen
96 kilodaltons, 753
pathogenic isolate specific, 955
T-cell responses, 3941
carbohydrate
mammalian cell membrane, 2389
DNA elements
repetitive, 1660
glycosphingolipid recognition
specificity, 43
trophozoites, 43
immune sera, 3941
integral membrane protein, 753
lectin
adherence, 1802
galactose specific, 1802
lipid
mammalian cell membrane, 2389
monoclonal antibodies, 955, 1802, 3458
nonpathogenic isolates, 753
pathogenic, 1660
pathogenic isolates, 753
pathogenic versus nonpathogenic strains, 1802
polymerase chain reaction, 1660
proteinases
cysteine, 1396
specific labeling, 1396
T cells
suppression of responses, 3941

trophozoites
glycosphingolipid recognition, 43
Enteric fevers
Salmonella serovar clones
evolutionary genetic relationships, 2262
Enterococcus faecalis
hemolysin/bacteriocin
expression, 3914
HlyB-type function, 3914
transport protein, 3914
Enterocyte brush border
attaching effacement, 1316
E. coli O111
enteropathogenic, 1316
plasmid, 1316
rabbit, 1316
Enterotoxin gene
bacteriophage, 1614
sezA$^+$, 1614
silent, 1614
staphylococcal, 1614
Enterotoxins
A, 2067
alkaline phosphatase fusion protein, 3645
assay, 930
B, 3494
C. jejuni, 2414
C. perfringens, 3109
C. perfringens type A, 1999
cloning, 970
cyclic GMP, 1402
E. coli, 930, 970, 1159, 1402, 1817, 3645
enteroinvasive, 3717
heat labile, 1159
heat stable, 930, 970, 1159, 1817
alkaline phosphatase fusion protein, 3645
STa, 1402
STb, 3645
immunization
fusion peptide, 1159
monoclonal antibody, 2755
phorbol esters, 1402
proteolysis, 1999
receptors
intestinal, 1817
S. aureus, 2067
S. aureus enterotoxin B, 3494
STb, 930
STb gene, 970
T84 cells, 1402
toxic shock syndrome-like illness, 2067
V. cholerae
non-O1, 2755
Y. enterocolitica, 2755
Enteroviruses
Campylobacter isolates
adherence, 1101
invasion, 1101
HEp-2 cells, 1101
Enucleated cells
C. trachomatis growth, 3816
Eosinophils
granulocytes
extramedullar proliferation, 816
macrophages
inflammatory, 816
schistosomiasis mansoni, 816
Epithelial cell lines
S. dysenteriae
attachment, 2401
invasion, 2401
Epithelial cells
buccal, 124
Candida spp.
adhesion, 2005
E. coli
pyelonephritogenic, 1281
gastric, 1992
H. influenzae
adherence, 4036
invasion, 4036
H. pylori urease
toxicity, 1992
hemolysin, 1281
human, 2005
killing, 1281
nonoxynol-9, 2005
P. aeruginosa adhesin, 124
P. cepacia
adherence, 2578
renal proximal tubular, 1281
respiratory, 2578
Epithelium
alveolar, 433
corneal
rabbit, 114
glycosphingolipids
neutral, 114
P. aeruginosa
elastase, 433
P. aeruginosa binding, 114
permeability, 433
Epitopes
C. trachomatis major outer membrane protein
species specific, 3909
checkerboard immunoblotting, 2352
chlamydial major outer membrane proteins
elementary bodies, 1379
cholera enterotoxin-related enterotoxins, 2352
H. influenzae, 1558
pili, 2252
2-keto-3-deoxyoctulosonic acid, 1558
M. pneumoniae adhesion
B cell, T cell linked, 2464
M. tuberculosis protein
B cell, 245
T cell, 245
T. brucei variant surface glycoprotein, 2337
Erysipelothrix rhusiopathiae
antigen
cloning, 3116
protective, 3116
Erythrocytes
membranes
E. coli hemolysin binding, 1951, 1959
Escherichia coli
987P fimbrial gene cluster, 149, 801
adherence
pili, 1129
plasmid influence, 1223
renal tubular cells, 3434
adherence factors
HeLa cells, 1106
HEp-2 cells, 1106
adhesins, 1500
AFA-I, 279
AFA-III, 279
afimbrial, 279
mannose specific, 1995
SfaS, 2133
sialic acid binding, 2133
adhesion
Caco-2 cells, 893
glycoprotein glycans, 98
HeLa cells, 2690
inhibition, 98
villi, 2690
AF/R1 pilus genes
cloning, 1124
subunit, 1124
alkaline phosphatase fusion protein
STb, 3645
antigens
surface, 740
anti-idiotypic antibodies, 680
attaching effacement
plasmid encoded, 1316
rabbit enterocyte brush border, 1316
avian strains, 740, 1129, 3613
binding
intestinal mucin, 860, 868
small-bowel mucin, 794
Caco-2 cells
adhesion, 893
calcium, 1951, 1959
capsular polysaccharide, 222
capsules
adhesive, 2710
coexpression, 2710
polysaccharide, 2710
protein, 2710
chemotaxis, 2957
cloned, 1591
cloning
AF/R1 pilus genes, 1124
E. rhusiopathiae protective antigen, 3116
H. influenzae lipooligosaccharide synthesis gene(s), 1558
LKP pilus genes, 903
phospholipase D gene, 131
cloning vectors
segregation, 1141
stable, 1141
coli surface antigens, 341
colibacillosis
treatment, 98
collagens
binding, 449
colonization factor
streptomycin-treated mouse large intestine, 1471
colonization factor antigen II
coli surface antigens, 341
colonization factor antigens, 3442
colonizing, 1337
cyclic GMP, 1402
cytotoxins, 3717
diarrhea associated, 279
diarrheagenic, 1106
diarrheic weaned rabbits, 2690
Dr receptor recognition, 279
enteroadherent, 1124
enterohemorrhagic, 3959
mouse model, 2438
enteroinvasive, 3717
enteropathogenic, 761, 794, 1106, 1316
Tn*phoA* mutants, 1565
enterotoxigenic, 149, 449, 801, 893, 930, 1843, 1870, 3594, 4030
colonization, 341
mutants, 4156
protective immunogenicity, 341

virulence genes, 4156
enterotoxin-producing strains
immunization, 1159
enterotoxins, 3717
heat stable, 930, 970, 1402, 1817, 3645
epithelial cells
killing, 1281
renal proximal tubular, 1281
erythrocyte membranes, 1951, 1959
fecal, 1141
fimbriae
987P, 149, 801
epitope analysis, 1843
F1C, 3434
F4 (K88) antigen complex, 1843
F1845, 279
genetically engineered, 3434
K99, 98
S, 3434
type 1, 37, 1995
fimbrial antigen complex
epitope analysis, 1870
F4, 1870
fimbrial proteins
antigenic mimicry, 680
type 1, 680
FimH protein, 1995
glycoprotein glycans, 98
H. influenzae protective surface antigen, 1909
heat-labile enterotoxins, 1159
heat-stable enterotoxins, 1159
alkaline phosphatase fusion protein, 3645
assay, 930
cloning, 970
gene, 970
intestinal receptors, 1817
STa, 1402
STb, 930, 970, 3645
hemagglutinins
Dr, 279, 695
mannose resistant, 1106
plasmid encoded, 1106
hemolysin, 1281
alpha, 3029
binding, 1951, 1959
calcium, 1951, 1959
endothelial cell function, 3796
epitopes, 3029
erythrocyte membranes, 1959
hydroxyeicosatetraenoic acid, 2659
leukotriene, 2659
monoclonal antibodies, 822, 3029
rabbit lungs, 2659
hemolysin determinant, 828
hemolysin negative, 1591
hemolysin positive, 1591
HEp-2 cells, 761
invasion, 1565
hlyC gene
nonreciprocal complementation, 828
human, 1141
immunization, 1691
inflammatory mediator release, 1591
intestines
fluid secretion, 1337
large, 1141, 1471
mouse, 1141, 1471
small, 1337
streptomycin treated, 1141, 1471, 2957
villous function, 1337
K1
site-directed mutation, 275
K-1-positive blood culture isolates, 222
killing, 3448
lectin
oligosaccharide receptors, 3073
type 1 fimbrial, 3073
lipopolysaccharide
antigenic relationships, 1391
macrophages
peritoneal, 3448
mannose resistant, 1500
mediator release
basophils, 1500
lymphocytes, 1500
monocytes, 1500
polymorphonuclear granulocytes, 1500
monoclonal antibodies, 822, 1843, 1870
hemolysis, 3029
motility, 2957
mucin
binding, 794, 860, 868
intestinal, 860, 868
"link" glycopeptide, 868
small bowel, 794
neutrophil killing, 37
nontoxigenic, 1337
nutrient broth containing glucose, 1471
O18, 373
O78, 1129
O111, 1316
O157:H7, 1223, 1391
OmpA
antibody response, 1691
immunization, 1691
periplasmic C-terminal domain, 1691
OmpF porin
leukocyte activators, 2719
synthetic peptide segments, 2719
P. aeruginosa toxin A
secretion, 1133
pap-related sequences, 471
peptide
fusion, 1159
immunization, 1159
phorbol esters, 1402
pili
987P, 4030
adherence, 1129
AF/R1, 1124
CS1 major subunit gene, 3594
type 1, 3448
piliated, 868
pilin gene
type 1, 275
plasmids, 149, 1223, 1316
platelets
human, 1591
signal transduction, 1591
porin
OmpF, 2719
protein kinase C
protein phosphorylation, 761
proteins
OmpA, 1691
pyelonephritogenic, 1281
rabbits, 1124
receptors
987P pili, 4030
renal tubular necrosis, 3959
restriction fragment length polymorphisms, 471
rns homologs, 3442
rrn operons, 471
serotype O157:H7 strain CL-49, 860, 868
serum resistance, 222
Shiga-like toxin II variant, 1232
Shiga-like toxin type II, 3959
signal transduction
human platelets, 1591
ST_{pa} transposon, 801
swollen-head syndrome, 3613
T84 cells, 1402
T. pallidum endoflagellar sheath protein, 2025
Tn*phoA* mutants, 1565
toxin A
P. aeruginosa, 1133
secretion, 1133
uropathogenic, 279, 471, 695
vaccines
O-polysaccharide conjugates, 373
villous function
impaired, 1337
Escherichia hermannii
lipopolysaccharide
antigenic relationships, 1391
Eubacterium spp.
arthritis
chronic, 523
cell wall fragments, 523
intestinal flora
human, 523
Exopolysaccharide
alginate, 1344
mucoid, 1344
oxygen-dependent up-regulation, 1344
P. aeruginosa, 1344
mucoid, 1835
Exotoxins
A, 978
P. aeruginosa, 978, 1415
pH
low, 1415
Triton X-114 binding, 1415

Fab fragments
C. albicans yeast-to-mycelium transition, 3810
monoclonal antibody
C. albicans germ tube mannoprotein, 3810
F-actin
Caco-2 cells, 1048
L. monocytogenes, 3477
spread, 1048
polymerization, 3477
Fatty acids
B. parapertussis
heat-labile toxin inhibition, 4045
Ferrets
C. jejuni-induced enteric disease
model of immunity, 1848
domestic, 1848
Fibrin thrombi
adherence
fibronectin mediated, 3015
streptococci
group A, 3015
group C, 3015
Fibrinogen
C. albicans, 2750
Fibrin-platelet clots
lipoteichoic acid, 315
S. epidermidis
adherence, 315

Fibroblasts
gingival
human, 1720
IFN-γ, 833
IFN-γ-induced cytotoxicity, 32
interferon production, 399
murine, 833
S. flexneri, 399
T. denticola
interaction, 1720
T. gondii
growth inhibition, 833
Fibronectin
receptor
peptide analogs, 2593
S. aureus attachment, 2593
T. denticola adherence
tip oriented, 3924
Fimbriae
987P
activation of expression, 801
gene cluster, 149, 801
adhesins
mannose specific, 1995
antigenic mimicry, 680
anti-idiotypic antibodies, 680
Dr receptor recognition, 279
E. coli, 98, 3434
diarrhea associated, 279
enterotoxigenic, 149, 801, 1843
type 1, 680, 1995
uropathogenic, 279
F1C, 3434
F4 (K88) antigen complex
epitope analysis, 1843
F1845, 279
FimH protein, 1995
genetically engineered, 3434
HEp-2 cell invasion, 2014
K88-specific receptors
ileal mucus, 3178
K99, 98
monoclonal antibodies, 1843
P. mirabilis, 3330
pap-2 encoded, 4055
receptors
ileal mucus, 3178
K88 specific, 3178
S, 3434
S. typhimurium
type 1, 2014
stage-specific embryonic antigen 4, 4055
urinary tract, 3330
Fimbrial antigen complex
E. coli
enterotoxigenic, 1870
epitope analysis, 1870
F4, 1870
monoclonal antibodies, 1870
987P fimbrial gene cluster
E. coli
enterotoxigenic, 149, 801
plasmid, 149
ST_{pa} transposon, 801
Fish
V. anguillarum, 3731
Flagellin
B. burgdorferi, 1711
cloning, 1711
gene amplification, 1711
Flagellin genes
C. coli, 2686
C. jejuni, 2686
polynucleotide sequence relationships, 2686
Flow cytometry
T cells
immune, 1685
Foreign antigen secretion system
mycobacteria, 4049
Fowl typhoid
immunity, 2283
virulence plasmid-cured *S. gallinarum* derivative, 2283
Francisella tularensis
antigens, 2664
T cells, 2664
Friend leukemia virus
C. albicans, 1796
Fructose-1,6-diphosphate-dependent L-(+)-lactate dehydrogenase gene
cloning, 1290
S. mutans, 1290

Gangliosides
accessibility, 2888
B cells
membrane architecture, 2888
C3H/HeJ mice, 2888
erythrocytes, 2555
N. subflava receptors, 2555
Sia-1 adhesin, 2555
Gardnerella vaginalis
cytolytic toxin, 3751
Gastritis
beagles
gnotobiotic, 2606
H. pylori, 1763, 2606
pigs
barrier born, 1763
type B, 1763
Gastroenteritis
V. parahaemolyticus
hemolysins, 3568
Gastrointestinal colonization
C. albicans
mice, 1514
model, 1514
gbp gene
S. mutans, 667
sequence, 667
Gene fusion
cholera toxin B subunit, 70
Genital infection
chlamydial
immunization, 2599
Genital tract
C. trachomatis
oculogenital serovars, 2021
virulence, 2021
Gerbils
B. divergens, 4076
GG2EE macrophage cell line
anti-*Candida* activity
augmentation, 1073
IFN-γ, 1073
interleukin-1, 1073
tumor necrosis factor, 1073
Giardia lamblia
cysts
excystation, 3516
in vitro derived, 3516
excystation, 3516
macrophages
Peyer's patch, 3202
trophozoites
ingestion, 3202
Giardia muris
lymphocyte proliferation, 2683
Peyer's patches, 2683
Gingival crevicular fluid
inflammatory periodontal disease, 2621
interleukin-1-like factor, 2621
Glucan-binding protein gene
S. mutans, 667
sequence, 667
Glucocorticoids
bacterial translocation, 3257
elevations, 3257
thermal injury, 3257
α-Glucosidase
C. albicans mutant, 2804
C. stellatoidea, 2804
sucrose inhibitable, 2804
Glucosyltransferase
S. downei, 2452
Glucosyltransferase activity
S. mutans, 1509
Glycolipid receptor specificities
Shiga-like toxin type II, 611
Shiga-like toxin type II variants, 611
Glycolipids
core, 421
monoclonal antibodies, 421
Glycopeptides
ABO blood group antigenic determinants, 3966
binding, 868
cholera toxin binding
inhibition, 3966
E. coli
piliated serotype O157:H7 strain CL-49, 868
gastric mucin
pig, 3966
"link," 868
mucin
intestinal, 868
Glycoprotein glycans
colibacillosis treatment, 98
E. coli adhesion
inhibition, 98
K99 fimbriae, 98
Glycoproteins
T. brucei, 2337
Glycosphingolipids
corneal epithelium
rabbit, 107, 114
E. histolytica trophozoites
recognition specificity, 43
fimbriae
pap-2 encoded, 4055
lactosylceramide, 2085
neutral, 107, 114
P. aeruginosa, 2361
P. aeruginosa binding, 107, 114
receptors, 2361
stage-specific embryonic antigen 4, 4055
Gram-negative bacteria
anti-inflammatory agents, 2056
bactenecins, 3724
facultative, 3934
inhibition of vital functions, 3724
membrane permeabilization, 3724
mucosal inflammation, 2056
neutrophil defensins
bactericidal activity, 3934
oral, 3934

receptors
plasminogen, 21
Granulocytes
C. albicans
host resistance, 3319
eosinophils
extramedullar proliferation, 816
interleukin-1
recombinant, 3319
macrophages
inflammatory, 816
S. aureus delta toxin, 1653
schistosomiasis mansoni, 816
Granulomas
Bcg gene, 1210
foreign body, 1210
lymphocytes, 1577
M. bovis, 1210
mice, 1210, 1577
mononuclear cells
adherent, 1577
regulation, 1210
schistosomiasis mansoni, 1577
groE stress response operon
C. trachomatis hyp operon, 2701
E. coli, 2701
GS-5 chromosome
pulsed-field gel electrophoresis, 838
S. mutans, 838
size, 838
gtfS gene
S. downei, 2452
Guinea pigs
cryptosporidiosis
animal model, 674

H-2 complex
regions, 573
S. typhimurium clearance, 573
Haemocin
colonization role, 1600
distribution, 1600
H. influenzae, 1600
Haemophilus influenzae
adherence
epithelial cells, 4036
antigen
protective surface, 1909
bacteriocin, 1600
epithelial cells
adherence, 4036
invasion, 4036
haemocin
role in colonization, 1600
species distribution, 1600
Hi-PAL (P6)
antibody, 3272
non-fatty acylated form, 3272
recombinant, 3272
immunoglobulin A1 protease genes
cleavage site specificity determinant, 320
invasive capacity, 3455
lipopolysaccharides
phase variable, 3455
lipoprotein
outer membrane, 3388
LKP pilus genes
cloning, 903
nontypeable, 903, 1909
PCP
antigenic conservation, 3388
antisera, 3388
pili
genes, 903
LKP, 903
protective surface antigen
expression in *E. coli*, 1909
proteins
Hi-PAL (P6), 3272
receptors
epithelial, 3807
erythrocyte, 3807
inheritance, 3807
Haemophilus influenzae type b
antibody
serum factor-induced resistance, 914
antigen
protective surface, 1909
cloning, 1558
2-keto-3-deoxyoctulosonic acid epitope, 1558
lipooligosaccharide biosynthesis genes
mutations, 2343
lipooligosaccharide synthesis gene(s), 1558
outer membrane protein
mutant, 3312
P2 major outer membrane protein
mutant, 3312
pili
epitopes, 2252
pilin gene
strain M43p$^+$, 1065
protective surface antigen
expression in *E. coli*, 1909
serum factor-induced resistance, 914
strain M43p$^+$ pilin gene
cloning, 1065
sequence, 1065
virulence, 2343
Haemophilus parainfluenzae
adhesin
outer membrane protein, 3833
Haemophilus somnus
outer membrane protein
78 kilodalton, 237
Hamsters
C. jejuni flagellar variants, 2214
LSH, 144
Lyme arthritis, 144
Syrian, 2214
Heart cross-reactivity
S. mutans, 3545
Heat shock protein 70 family
C. trachomatis, 189
Heat shock proteins
antigens, 2186
B. burgdorferi, 2186
C. trachomatis, 3061
L. pneumophila, 3380
mycobacterial, 1461
Heat shock response
B. burgdorferi, 2186
Heat shock-related proteins
immune response, 1408
P. falciparum, 1408
Heat-labile toxins
B. parapertussis, 1456, 4045
fatty acids, 4045
Heat-stable enterotoxin gene
cloning, 3325
NAG-ST, 3325
sequence, 3325
V. cholerae, 3325
HeLa 229 cells
B. pertussis, 3187
invasion
inhibition, 3187
phorbol myristate acetate, 3187
HeLa cells
adherence, 1634, 2690
B. pertussis invasion assay, 2516
E. coli adherence factors, 1106
E. coli adhesion, 2690
L. pneumophila
antigen expression, 3380
htpAB heat shock operon, 3380
monoclonal antibodies, 1634
T. vaginalis motility, 1634
Helicobacter pylori
beagles
gnotobiotic, 2606
broth culture supernatants, 603
cytotoxin activity
vacuolizing, 603
epithelial cells
gastric, 1992
gastritis type B, 1763
pigs
barrier born, 1763
proteins
serologic response, 603
vacuolizing cytotoxin activity, 603
surface properties
in vitro, 3056
urease, 992
urease activity, 1992
Hemagglutinins
B. pertussis, 7, 2523, 2895
C. botulinum, 3173
Dr, 279, 695
Dr receptor recognition, 279
E. coli
diarrhea associated, 279
diarrheagenic, 1106
enteropathogenic, 1106
uropathogenic, 279, 695
filamentous, 7, 2895
mannose resistant, 1106
plasmid encoded, 1106
S. dublin aroA vaccine strains, 2523
V. cholerae, 3698, 4011
Heme uptake
B. fragilis iron-regulated outer membrane protein, 3954
Hemin
binding, 4016
culture medium, 4016
P. gingivalis, 4016
trypsinlike protease, 4016
Hemolysin gene
V. cholerae El Tor, 2706
V. vulnificus cytolysin gene, 2706
Alpha-hemolysin/leukotoxin gene family
A. actinomycetemcomitans leukotoxin gene
homology, 920
Hemolysins
A. pleuropneumoniae, 3829
alpha, 3029
B. cereus, 2214, 2220
bicomponent, 2214, 2220
binding
calcium, 1959
calcium requirement, 1951
erythrocyte membranes, 1951, 1959

E. coli, 822, 828, 1951, 1959, 2659, 3029, 3796
pyelonephritogenic, 1281
E. faecalis, 3914
endothelial cell function, 3796
epithelial cells
killing, 1281
renal proximal tubular, 1281
HlyA, 1853
proteolytic processing, 3375
hlyC gene, 828
HpmA, 1853
cytotoxic activity, 1861
hydroxyeicosatetraenoic acid, 2659
immunization, 3829
L. monocytogenes, 3601
extraintestinal dissemination, 3147
leukotriene, 2659
monoclonal antibodies, 822, 3029
P. cepacia, 4020
Proteus isolates, 1853, 1861
rabbit lungs, 2659
thermostable direct, 3568
thermostable direct related, 3568
V. cholerae
HlyA, 3375
proteolytic processing, 3375
V. parahaemolyticus gastroenteritis, 3568
Hemolytic effects
T. foetus, 3627
Hemolytic substances
staphylococci
coagulase negative, 2144
Hendersonula toruloidea
proteinase, 2856
HEp-2 cells
anaerobiosis, 2014
Campylobacter isolates
adherence, 1101
invasion, 1101
E. coli
enteropathogenic, 761, 1565
Tn*phoA* mutants, 1565
E. coli adherence factors, 1106
enteroviruses, 1101
invasion, 2014
protein kinase C, 761
protein phosphorylation, 761
S. typhimurium
anaerobiosis, 2014
fimbriae, 2014
growth phase, 2014
Histoplasma capsulatum
T-cell hybridomas, 1538
hlyA gene
V. cholerae, 4106
hlyC gene
E. coli, 828
lktC, 828
nonreciprocal complementation, 828
htpAB heat shock operon
L. pneumophila, 3380
sequence, 3380
htpB gene
common antigen gene, 3154
L. pneumophila, 3154
sequence, 3154
Human leukocyte antigens
bacterial antigens
cross-reactivity, 1774
C. albicans, 3765
class I, 1774
monoclonal antibodies, 3765
S. flexneri
monoclonal antibodies, 1774
Humoral antibody response
A. pleuropneumoniae hemolysin
immunization, 3829
swine, 3829
Hybridomas
H. capsulatum reactive, 1538
T cell, 1538
Hydrophobicity
S. mutans cell surface protein antigen
mutants, 289
Hydroxyeicosatetraenoic acid
E. coli hemolysin, 2659
rabbit lungs, 2659
hyp operon
C. trachomatis, 2701
E. coli groE stress response operon, 2701
Hyperoxia
U. urealyticum pneumonia, 3487

iC3B
C. albicans
avirulent mutant, 909
receptors, 909
Immune serum
B. abortus, 254
Immune suppression
A. actinomycetemcomitans, 3856
Immunization
A. pleuropneumoniae hemolysin, 3829
anthrax, 303
C. neoformans, 1919
C. psittaci
UV inactivated, 2599
viable, 2599
chickens, 557
chlamydial genital infection, 2599
cholera toxin
B subunit, 2420
E. coli
enterotoxin-producing strains, 1159
OmpA, 1691
whole, 1691
E. corrodens
lipopolysaccharide, 416
E. maxima, 557
hamsters
LSH, 144
immunoglobulin A-secreting cells
peripheral blood, 2002
L. monocytogenes, 3973
Lyme arthritis, 144
monoclonal antibodies, 3407
cryptococcal polysaccharide, 1919
E. maxima gametocyte antigen, 557
oral, 2002
P. gingivalis, 3394
P. vinckei
S. typhimurium, 3425
passive, 144
peptide
fusion, 1159
S. lactis
recombinant, 2929
S. mutans, 3407
S. mutans surface protein antigen gene, 2929
S. pneumoniae type 12F polysaccharide-diphtheria toxoid conjugate
antibody-secreting peripheral blood lymphocytes, 2547
S. typhimurium, 1691
attenuated, 2048
B. abortis protein, 2048
recombinant plasmid, 2048
S. typhi-S. sonnei vaccine, 2002
swine, 3829
T. pallidum endoflagella, 3158
T. parva, 3574
Y. enterocolitica, 2420
Immunodeficient beige athymic mice
C. neoformans, 3300
Immunodeficient hosts
Cryptosporidium infection
mouse models, 961
Immunodeficient mice
candidiasis
mucosal, 1093
resistance, 3813
systemic, 1093
vaginal, 3813
congenital, 1093, 3813
gnotobiotic, 3813
Immunogens
T. pallidum
lipoprotein, 384
membrane, 384
Immunoglobulin A1 protease genes
cleavage site specificity determinant, 320
H. influenzae, 320
Immunoglobulin A protease
S. pneumoniae, 2733
Immunoglobulin-binding sites
streptococci
group B, 332
Immunoglobulins
A. actinomycetemcomitans
immune suppression, 3856
B cells, 3856
bovine
colostral, 2962
colostral
bovine, 2962
cryptosporidiosis, 2962
degradation
IgA1, 1979
IgA2, 1979
IgG, 1979
P. mirabilis proteolytic enzyme, 1979
human, 1384
IgA
E. coli type 1 fimbrial lectin, 3073
nonimmune binding, 1789
oligosaccharide receptors, 3073
opsonic effect, 3663
secretory, 3073
streptococci, 3663
T. gondii target antigens, 2446
IgA1 degradation
oral streptococci, 1186
IgA-secreting cells
peripheral blood, 2002
IgG
P. carinii, 456
opsonic effect, 3663
P. carinii, 456
P. mirablis
proteolytic enzyme, 1979
preparation for intravenous use, 1384
streptococci
IgA1 degradation, 1186
oral, 1186

type II group B, 1789, 3663
tumor necrosis factor alpha production suppression, 1384
Inflammation
tumor necrosis factor, 297
Inflammatory agent
P. aeruginosa, 659
phospholipase C, 659
Inflammatory mediator release
E. coli
cloned, 1591
hemolysin negative, 1591
hemolysin positive, 1591
Influenza virus infection
pulmonary antibacterial defenses, 2809
Integral membrane proteins
B. burgdorferi, 983
lipoproteins, 983
Interferons
C. albicans, 1073
germ tube formation, 260
fibroblasts, 32
S. flexneri infected, 399
GG2EE macrophage cell line, 1073
IFN-γ, 260, 833, 1073, 3671
antibody enhancement by adjuvants, 427
induced cytotoxicity, 32
L. monocytogenes, 2386
P. chabaudi, 3225
P. falciparum-immune donor cells, 2989
R. conorii growth inhibition, 1886
toxoplasmic encephalitis treatment, 3050
tuberculostatic macrophage functions, 2675
L929 cells, 3279
lipopolysaccharide, 32
P. chabaudi chabaudi, 3671
R. prowazekii
resistant, 3279
S. flexneri-infected fibroblasts, 399
T. gondii
fibroblasts, 833
yersinia invasiveness, 2245
Yop1, 2245
yopA, 2245
Interleukin-2 receptor
bovine, 3847
T cells, 3847
Tac antigen, 3847
Interleukins
C. albicans, 1073
host resistance, 3319
GG2EE macrophage cell line, 1073
gingival crevicular fluid, 2621
granulocytes, 3319
IL-1, 978, 1073, 3973
macrophage, 1254
recombinant, 3319
IL-1β
recombinant, 4153
IL-1-like factor, 2621
IL-4
tuberculostatic macrophage functions, 2675
IL-6, 269, 1273
L. monocytogenes, 3973
M. fermentans, 1273
macrophage antibacterial activities stimulation, 269
macrophages, 1273
inflammatory peritoneal, 4153
peritoneal, 978
monocytes, 1273
P. aeruginosa
exotoxin A, 978
pertussis toxin, 4153
T-cell differentiation, 3973
Intestinal flora
arthritis
chronic, 523
Eubacterium spp.
cell wall fragments, 523
human, 523
Intestines
Aeromonas strains
invasiveness, 1924
E. coli, 1141
chemotaxis, 2957
colonization factor, 1471
motility, 2957
nontoxigenic colonizing, 1337
fluid secretion, 1337
large, 1141, 1471, 2957
mouse, 1141, 1471
small, 1337
streptomycin treated, 1141, 1471, 2957
villous function
impaired, 1337
inv genes
DNA supercoiling, 1879
S. typhimurium, 1879
inv-homologous sequences
Y. enterocolitica
nonpathogenic isolates, 1059
Iron
bacterial, 26
oxygen radical-mediated killing
phagocytes, 26
S. aureus, 26
phagocytes, 26
S. aureus, 26
V. cholerae
virulence, 55
Iron acquisition
P. haemolytica, 2091
transferrin receptor
bovine specific, 2091
Iron acquisition systems
L. monocytogenes, 2715

Jacalin
opsonic effect, 3663
streptococci
type II group B, 3663

Kallikrein-kinin system
activation, 2139
C. albicans proteinase, 2139
plasma, 2139
Klebsiella pneumoniae
anti-O antibody
capsule penetration, 1421
capsulated, 2828
endotoxemia
lethal, 2828
protection, 2828
monoclonal antibodies
protection, 2828
Kupffer cells
L. monocytogenes, 2313
T cells
antigen-specific blastogenic response, 2313
T. musculi
immunoglobulin-mediated elimination, 1971

L929 cells
interferon resistance
selection, 3279
R. prowazekii, 3279
L. monocytogenes
killed, 1254
viable, 1254
Lactoferrin
mycobacterial heat shock protein
cross-reactivity, 1461
homology, 1461
Lactosylceramide
adhesion receptor, 2085
C. albicans, 2085
C. neoformans, 2085
Laminin
C. albicans germ tubes, 48
receptors, 48
Lectins
adherence, 1802
binding proteins, 502
Chlamydia spp., 502
E. coli, 3073
E. histolytica, 1802
fimbrial, 3073
galactose specific, 1802
immunoglobulin A
secretory, 3073
monoclonal antibodies, 1802
receptors
oligosaccharide, 3073
Legionella anisa
models
cell culture, 3139
guinea pig, 3139
protozoan, 3139
Pontiac fever, 3139
virulence, 3139
Legionella genus
mip-like genes, 2912
Legionella micdadei
ingestion, 3307
neutrophils, 3307
Legionella pneumophila
antigens
60 kDa, 3380
cell killing, 2585
common antigen gene, 3154
heat shock protein, 3380
HeLa cells, 3380
htpAB heat shock operon
sequence, 3380
htpB
sequence, 3154
intracellular growth, 2585
protease, 2585
secretory protein, 2585
Leishmania amazonensis
macrophages, 779, 1730
parasitophorous vacuoles
acidic pH, 779
proteases
lysosomal, 1730
Leishmania donovani
C57BL/6 *ep/ep* mice
euthymic, 3893

C57BL/10 mice
curing phenotype, 3151
noncuring phenotype, 3151
cyclosporin A, 3151
lipophosphoglycan epitope, 3500
macrophages
lipophosphoglycan epitope, 3500
T cells
functional changes, 3163
phenotypic changes, 3163
tissue cellular immune response defect, 3893
Leishmania major
antigen-liposomes
protective, 3233
C3H/HeN mice, 4149
cutaneous leishmaniasis, 3233
cytokine secretion
patterns, 3863
defense mechanisms, 1146
inbred mice
susceptibility, 4149
macrophages, 2297
activation, 1146, 4149
monoclonal antibodies
lipophosphoglycan specific, 2297
P/J mice, 4149
T-cell hybridomas, 1146
Leishmaniasis
cellular immune responses, 2198
cutaneous, 2198
humoral immune responses, 2198
vaccination, 2198
Leprosy
M. leprae subunits, 711
vaccination, 711
Leptospira interrogans
association with host cells in vitro, 581
hardjo serovar, 2177
sphingomyelinase C gene, 2177
Leptospires
association with host cells in vitro, 581
Lethal toxin
B. anthracis, 1606
lethal factor component, 1606
monoclonal antibodies, 1606
Leukocidin
phosphoinositide metabolism
stimulatory effect, 2745
polymorphonuclear leukocytes, 2745
staphylococcal, 2745
Leukocyte activators
E. coli porin OmpF
synthetic peptide segments, 2719
Leukocytes
binding, 2951
human, 2951
M. avium-M. intracellulare complex, 2951
radiosensitive, 1971
T. musculi
immunoglobulin-mediated elimination, 1971
Leukotoxin gene
A. actinomycetemcomitans, 920
alpha-hemolysin/leukotoxin gene family
homology, 920
Leukotoxins
A. actinomycetemcomitans, 1782
cations, 1782
lktC gene, 828
neutrophil chemiluminescence
bovine, 1485
osmotic protectants, 1782
P. haemolytica, 828, 1485
Leukotriene
delta-toxin
S. aureus, 2678
E. coli hemolysin, 2659
melittin
bee venom peptide, 2678
rabbit lungs, 2659
Lewis rats
M. leprae
immunity, 495
tolerance, 495
Lipid
E. histolytica, 2389
mammalian cell membrane, 2389
Lipid A
binding sites
phagocytes, 4069
cytokine induction, 2429
monophosphoryl, 2429
phagocytes, 4069
Lipid A analogs
macrophages
prostaglandin release, 217
nontoxic, 217
prostaglandin release
macrophages, 217
Lipooligosaccharide synthesis gene(s)
cloning, 1558
H. influenzae, 1558
Lipooligosaccharides
antibodies, 2204
antigens, 2204
biosynthesis genes
mutations, 2343
H. influenzae
virulence, 2343
monoclonal antibody binding
inhibition, 2204
N. meningitidis, 2204
Lipopolysaccharides
A. pleuropneumoniae adherence
porcine tracheal rings, 3523
antigenic relationships
B. abortus, 1391
B. melitensis, 1391
E. coli O157:H7, 1391
E. hermannii, 1391
anti-idiotype antibody
anti-lipid A monoclonal antibody, 416
E. corrodens lipopolysaccharide, 416
immunization, 416
C. fetus
type A, 2738
chlamydial, 205
common antigen, 1030
cytokine induction, 2429, 3743
cytokine response, 2375
E. corrodens
anti-lipid A monoclonal antibody, 416
fibroblasts, 32
free, 2375
growth-dependent changes, 1030
H. influenzae
invasive capacity, 3455
IFN-γ-induced cytotoxicity
fibroblasts, 32
induced phenomena
inhibition, 2397
lectin-mediated binding, 2738
lipoprotein bound, 2375
macrophages, 2375
monoclonal antibodies
anti-core glycolipid, 421
monocytes, 2375
neutrophils
phenotype, 1647
superoxide anion generation, 1647
nontoxic, 2862
P. aeruginosa, 1030
phase variable, 3455
R. capsulatus, 3743
R. sphaeroides, 2862
serotype specific, 1030
T cells
suppressor, 2862
toxicity
lethal, 416
tumor necrosis factor alpha
antibody, 2397
Lipoproteins
B. burgdorferi, 983
H. influenzae, 3388
integral membrane proteins, 983
lipopolysaccharide bound, 2375
M. hyopneumoniae, 2637
OprI, 2241
p65, 2637
P. aeruginosa, 2241
PCP, 3388
T. pallidum membrane immunogen, 384
Liposomes
anti-idiotypic antibodies, 1932
secretory immune responses
pathogens of mucosal surfaces, 1932
protective, 1932
vaccine
oral, 1932
Lipoteichoic acids
fibrin-platelet clots, 315
monocytes
human, 566
oxidative burst stimulation, 566
S. epidermidis
adherence, 315
S. pyogenes, 3779
Listeria monocytogenes
50% lethal doses
approximate, 2940
intragastric, 2940
intraperitoneal, 2940
antigen processing
inhibition, 3601
macrophage mediated, 3601
antigens
T-cell-reactive proteins, 2792
blastogenesis, 2313
Caco-2 cells, 1048
cloning, 2792
delayed-type hypersensitivity, 654
extraintestinal dissemination, 3147
F-actin, 1048
polymerization, 3477
growth
intracellular, 3770
hemolysin, 3147
hemolysin-producing strains, 3601
IFN-γ, 2386
immunization, 3973
interleukin-1, 3973
interleukin-1 production, 1254
intragastric feeding, 2940
iron acquisition systems, 2715
killed, 1254
Kupffer cells, 2313

macrophages, 1254
movement
cell to cell, 1048, 3770
intracellular, 1048, 3477
mutants
nonhemolytic, 3988
noninvasive, 3988
nonvirulent, 3477
p60 protein gene
probe, 1943
proteins
stress, 3582
small-plaque mutants, 3770
stress proteins
species specific, 3582
systemic protection, 654
T cells, 2313
T-cell differentiation, 3973
T-cell subsets, 654
T-cell-reactive protein antigens, 2792
viable, 1254
virulence
coordinate regulation, 3988
Liver
perfusion model, 1965
T. musculi
immunological elimination, 1965
Liver perfusion model
T. musculi
immunological elimination, 1965
lktC gene
hlyC, 828
nonreciprocal complementation, 828
P. haemolytica, 828
Lyme arthritis
hamsters
LSH, 144
immunization
passive, 144
synovial fluid antibodies
B. borgdorferi protein reactivity, 2404
Lymphocytes
granulomas, 1577
mitogens, 3553
mononuclear cells
interactions, 1577
peripheral blood, 1114
antibody secreting, 2547
Peyer's patches
G. muris-infected mice, 2683
S. pneumoniae type 12F polysaccharide-diphtheria toxoid conjugate
immunization, 2547
schistosomiasis mansoni, 1577
T. cruzi, 1114
trichomoniasis, 3553
Lysis
antibody mediated, 119
complement dependent, 119
T. cruzi blood forms, 119

M protein
convertase inhibition, 2535
phosphorylase cross-reactive antibodies, 774
streptococcal, 774
group A, 2535
Macaca nemestrina
C. cinaedi, 3947
C. coli, 2149
C. fennelliae, 3947
C. jejuni, 2149
Macrophages
activation, 1146, 4149
alveolar, 3640
amphotericin B, 1296
antibacterial activities
stimulation, 269
antigen processing, 3601
B-cell stimulatory factor 2, 269
blacks, 632
bone marrow
proliferation, 3558
colony-stimulating factor
granulocyte-macrophage, 3558
cytokine response, 2375
cytokines, 1296
E. coli
killing, 3448
type 1 pili, 3448
eosinophil granulocytes
extramedullar proliferation, 816
epitope
lipophosphoglycan, 3500
G. lamblia trophozoites
ingestion, 3202
human, 214, 263
inflammatory, 816, 4153
interleukin-1, 978
interleukin-1 production, 1254
interleukin-1β, 4153
interleukin-6, 269, 1273
L. amazonensis, 1730
L. amazonensis infected, 779
L. donovani, 3500
L. major, 1146, 2297, 4149
L. monocytogenes, 1254
hemolysin producing, 3601
lipid A analogs
nontoxic, 217
lipophosphoglycan epitope, 3500
lipopolysaccharides
free, 2375
lipoprotein bound, 2375
M. avium complex
acquired immunodeficiency syndrome, 2564
colonial variants, 2564
M. fermentans, 1273
microbicidal activities, 263
monoclonal antibodies
lipophosphoglycan specific, 2297
muramyl dipeptide, 536
murine, 1273
mycoplasmas, 3558
neutrophils
cutaneous air pouches, 297
lipopolysaccharide-induced accumulation, 297
oxidative burst activity
in vivo activation, 1296
P. aeruginosa
exotoxin A, 978
P. brasiliensis
ultrastructure, 2628
P. falciparum, 214
antigens, 2923
parasitophorous vacuoles
acidic pH, 779
peritoneal, 978, 3448, 4153
permissiveness, 632
pertussis toxin, 4153
Peyer's patch, 3202
polymorphonuclear leukocytes
accumulation, 536
peritoneal cavities, 536
prostaglandin release
endotoxic induction, 217
proteases
lysosomal, 1730
schistosomiasis mansoni, 816
staphylococci
clindamycin treated, 197
wall degradability, 197
T. cruzi, 263
T. gondii, 263
T-cell hybridomas, 1146
tubercle bacilli
virulent, 632
tuberculostatic functions
activation, 2675
IFN-γ, 2675
interleukin-4, 2675
tumor necrosis factor, 2675
tumor necrosis factor, 214, 2923
whites, 632
Major histocompatibility complex class II
isotypes, 3877
toxic shock syndrome toxin 1
binding, 3877
Major histocompatibility complex DR_β
subsets
mycobacterial heat shock protein
cross-reactivity, 1461
homology, 1461
Malaria
acute, 2946
antibodies
DNA binding, 2156
DNA-binding antibodies, 2156
immunity
T cell dependent, non-antibody mediated, 2946
kidney pathology, 2156
T cell-dependent non-antibody-mediated immunity, 2946
Mannans
C. albicans avirulent mutants
hyphal form, 2061
D-Mannitol
C. neoformans
in vitro, 1664
meningitis, 1664
Mannoprotein
C. albicans germ tube, 3810
monoclonal antibody, 3810
Mast cells
mucosal, 88
T. hyodysenteriae, 88
Mediator release
adhesins, 1500
basophils, 1500
E. coli
mannose resistant, 1500
lymphocytes, 1500
monocytes, 1500
polymorphonuclear granulocytes, 1500
Melittin
bee venom peptide, 2678
leukotriene induction, 2678
polymorphonuclear granulocytes
metabolism, 2678
Membrane-fluidizing agents
colony-stimulating factor
granulocyte-macrophage, 3002
polymorphonuclear leukocytes, 3002

Meningitis
C. neoformans, 2115
cerebrospinal fluid
opsonic activity, 2115
Metalloproteases
Ancylostoma hookworm larvae
ecdysis, 3883
tissue invasion, 3883
V. anguillarum, 3731
zinc, 3731
Microflora
caries
humans, 1628
root surface, 1628
mip-like genes
Legionella genus, 2912
Mitogenicity
toxic shock syndrome toxin 1
mutants, 3020
Mitogens
lymphocytes, 3553
M. arthritidis, 228
T cells, 228
trichomoniasis, 3553
Monkeys
arachidonic acid cascade products
plasma, 3494
S. aureus enterotoxin B, 3494
Monoclonal antibodies
A. fumigatus cell wall antigens, 2105
adherence, 1634
ADP-ribosyltransferase, 746
antiflagellum, 3819
B. anthracis lethal toxin
lethal factor component, 1606
Brucella outer membrane proteins
surface exposed, 3980
C. albicans
binding site recognition, 3765
germ tube mannoprotein, 3810
hyphae, 625
surface antigen, 625
C. neoformans
polysaccharide, 1919
C. parvum sporozoite neutralization, 257
chlamydial lipopolysaccharide, 205
E. coli
alpha-hemolysin, 3029
enterotoxigenic, 1843, 1870
F4 fimbrial antigen complex, 1870
hemolysin, 822
E. corrodens
lipid A, 416
E. histolytica, 3458
galactose-specific adherence lectin, 1802
pathogen isolate-specific antigen, 955
pathogenic versus nonpathogenic strains, 1802
E. maxima
gametocyte antigen, 557
F4 (K88) fimbrial antigen complex
epitope analysis, 1843
Fab fragments, 3810
glycolipid
core, 421
HeLa cells, 1634
hemolysin, 822
human leukocyte antigen, 3765
immunization, 1919, 3407
chickens, 557
E. maxima, 557
isotype-switch family, 1919
K. pneumoniae, 2828
L. major, 2297
lipophosphoglycan specific, 2297
lipopolysaccharides, 421
M. avium complex protein antigens, 1445
macrophages, 2297
N. asteroides, 3122
N. gonorrhoeae
interactions with neutrophils, 1078
N. meningitidis 70-kilodalton iron-regulated protein, 3036
N. meningitidis lipooligosaccharide
inhibition of binding, 2204
NAD-glycohydrolase, 746
outer membrane protein PII, 1078
P. aeruginosa, 3819
adhesion inhibition, 124
pili, 124
P. endodontalis
serotype antigen, 2542
pertussis toxin, 746, 3369
PII, 1078
S. flexneri, 1774
S. mutans, 3407
superoxide dismutase, 3122
T. foetus antigens, 3078
T. vaginalis motility
inhibition, 1634
toxic shock syndrome toxin 1, 3020
V. cholerae non-O1 heat-stable enterotoxin, 2755
Y. enterocolitica heat-stable enterotoxin, 2755
yeast cell protoplasts, 625
Monocyte accessory cell activity
M. avium-M. intracellulare, 1369
T-cell proliferation
suppression, 1369
Monocytes
C. neoformans
growth inhibition, 1201
cytokine response, 2375
human, 566, 1273
interleukin-6, 1273
lipopolysaccharides
free, 2375
lipoprotein bound, 2375
lipoteichoic acids, 566
M. fermentans, 1273
oxidative burst
stimulation, 566
P. aeruginosa, 808
pyocyanine, 808
tuberculosis, 3286
tumor necrosis factor alpha, 3286
Mononuclear cells
adherent, 1577
granulomas, 1577
lymphocytes
interactions, 1577
schistosomiasis mansoni, 1577
Mononuclear leukocytes
human, 3996
stimulated, 3996
tumor necrosis factors
alpha, 3996
beta, 3996
Mononuclear phagocytes
B. abortus
intracellular survival, 879
cattle, 879
Monophosphoryl lipid A
suppressor T-cell activity
enrichment, 726
T-cell binding, 726
Moraxella bovis
pili
expression in *P. aeruginosa*, 1678
pilin gene, 1678
Mouse models
Cryptosporidium infection, 961
immunodeficient hosts, 961
Mucin
binding, 860, 868
E. coli, 860, 868
E. coli enteropathogens
binding, 794
glycopeptide
"link," 868
intestinal, 860, 868
small bowel, 794
Mucosal inflammation
anti-inflammatory agents, 2056
gram-negative bacteria, 2056
Mucosal surfaces
anti-idiotypic antibodies, 1932
liposomes
anti-idiotypic antibodies, 1932
pathogens, 1932
secretory immune responses
protective, 1932
vaccine
oral, 1932
Mucus
ileal, 3178
K88-specific receptors, 3178
Muramic acid
C. psittaci, 835
C. trachomatis, 835
gas chromatography-mass spectrometry, 835
Muramyl dipeptide
macrophages, 536
polymorphonuclear leukocytes
accumulation, 536
peritoneal cavities, 536
Mutacin-associated gene
S. mutans, 4126
Tn*916*, 4126
Mutans streptococci
adherence
oral bacteria, 1738
Mycobacteria
lungs
parabiotic mice, 2303
phagocytic cell response, 2303
Mycobacterial antigen 85 complex
genes, 272
Mycobacterial heat shock protein
cross-reactivity, 1461
homology, 1461
lactoferrin, 1461
major histocompatibility complex class II
DR_β subsets, 1461
transferrin, 1461
Mycobacterium avium complex
acquired immunodeficiency syndrome, 2564
colonial variants, 2564
macrophages, 2564
monoclonal antibodies, 1445
protein antigens
monoclonal antibodies, 1445

Mycobacterium avium-Mycobacterium intracellulare
binding, 2951
leukocytes, 2951
monocyte accessory cell activity, 1369
T-cell proliferation
suppression, 1369
Mycobacterium bovis BCG
antibody repertoires
culture filtrate antigens, 2192
Bcg gene, 1210
culture filtrate antigens, 2192
graulomas
regulation, 1210
Mycobacterium intracellulare
antigens, 17
bacteriophages
λgt11, 17
Mycobacterium kansasii
α-antigen gene
cloning, 550
Mycobacterium leprae
antibodies
household contacts, 2821
sera, 1327
antigenic determinants
serum antibodies, 1327
antigens, 1937
antibodies of household contacts, 2821
major immunogenic, 80
proline-rich repeats, 80
clones, 2821
immunity
antigen specific, 495
immunostimulating protein, 703
Lewis rats, 495
protein
immunostimulating, 703
proteins
expression by vaccinia virus, 4089
subunits, 711
superoxide dismutase, 1937
tolerance, 495
vaccination, 711
vaccinia virus, 4089
Mycobacterium lepraemurium
suppressor cells
antigen reactive, 3531
supressor factors
biological properties, 3531
Mycobacterium spp.
foreign antigen secretion system, 4049
Mycobacterium tuberculosis
blacks, 632
diet, 1843
epitopes
B cell, 245
T cell, 245
macrophages
permissiveness, 632
protein
35 kilodalton, 245
proteins
expression by vaccinia virus, 4089
T cells
CD2, 1843
erythrocyte receptor bearing, 1843
vaccinia virus, 4089
whites, 632
Mycoplasma arginini
arginine deiminase, 2510
arginine deiminase gene
cloning, 3788
sequence, 3788
Mycoplasma arthritidis
rats
strain differences in senstivity, 1584
T-cell mitogen
immunosuppressive properties, 228
Mycoplasma fermentans
high-molecular-weight material, 1273
interleukin-6, 1273
macrophage cultures, 1273
monocyte cultures, 1273
Mycoplasma gallisepticum
tetanolysin, 598
transmembrane diffusion channels, 598
Mycoplasma hyopneumoniae
lipoprotein
p65, 2637
p65 surface lipoprotein
cloned genomic fragment, 2637
immunogenic region, 2637
Mycoplasma pneumoniae
adhesin
B cell-, T cell-linked epitope, 2464
adhesin-related protein gene, 4163
cytadherence phase variation
protein, 3430
cytadhesin gene
sequence divergency, 2669
cytadhesin P1 gene
restriction fragment length polymorphism, 2017
human clinical isolates, 2017
protein
30-kilodalton adhesin related, 4163
cytadherence phase variation, 3430
Mycoplasma pulmonis
temperature-sensitive mutants, 2289
vaccines
rodents, 2289
Mycoplasmas
bone marrow macrophage proliferation
differential induction, 3558
colony-stimulating factor
granulocyte-macrophage, 3558
protein kinase C-independent pathway, 3564
THP-1 cells, 3564
tumor necrosis factor, 3564

NAD-glycohydrolase
monoclonal antibodies, 746
pertussis toxin activity, 746
Natural killer cells
antibody, 639
C. neoformans
growth inhibition, 639
human, 639
Neisseria gonorrhoeae
heat shock proteins, 719
monoclonal antibodies, 1078
neutrophil receptors
up-regulation, 2777
neutrophils
human, 1078
interactions, 1078
outer membrane protein PII, 1078, 2777
Pan 1 outer membrane protein, 3929
PII, 1078, 2777
pilA, 4145
pilB, 4145
pilus expression regulatory genes
conservation in genus *Neisseria*, 4145
proteins
heat shock, 719
receptors
neutrophil, 2777
up-regulation, 2777
Neisseria meningitidis
antigens
lipooligosaccharides, 2204
lipooligosaccharide antigens
antibodies, 2204
monoclonal antibody binding, 2204
monoclonal antibodies, 3036
mutants
outer membrane proteins, 1355
PorA, 1355
PorB, 1355
nasopharyngeal carriage, 569
outer membrane proteins
class 1, 569
class 5, 569
iron regulated, 2875
mutants, 1355
outer membrane serotype subcomplexes, 2008
PorA mutants, 1355
PorB mutants, 1355
protein
70 kilodalton, 3036
iron regulated, 3036
serogroup A, 2008
transferrin receptor, 2875
vaccines, 2875
Neisseria spp.
Pan 1 protein, 3929
Neisseria subflava
adhesin
Sia-1, 2555
gangliosides
erythrocyte, 2555
receptors, 2555
Neoglycolipids
C. albicans cell wall oligomannosidic residues, 3537
immunoreactivity, 3537
Neospora caninum
T. gondii challenge, 2699
Neuraminidase
immunocytochemical loalization, 586
T. cruzi, 586
Neutrophils
abscesses
functional activity, 4004
bovine, 1485
C. albicans
phenotypic switching, 1174
survival, 1174
candidacidal activity, 2696
candidastatic activity, 2696
chemiluminescence, 1485
colony-stimulating factor
granulocyte, 1647
cutaneous air pouches, 297
defensins
gram-negative bacteria, 3934
polymorphic expression, 3899
E. coli
type 1 fimbria bearing, 37
human, 1078
killing, 37
L. micdadei, 3307
lipopolysaccharide, 297, 1647
macrophages, 297
N. gonorrhoeae

interactions, 1078
monoclonal antibodies, 1078
PII, 1078
P. falciparum
killing, 788
P. haemolytica
leukotoxin, 1485
phenotype, 1647
rats
outbred, 3899
receptors
N. gonorrhoeae, 2777
up-regulation, 2777
respiratory burst activation, 37
superoxide anion generation, 1647
tumor necrosis factor, 297
tumor necrosis factor alpha, 788
Nocardia asteroides
monoclonal antibodies, 3122
superoxide dismutase, 3122
Nonoxynol-9
Candida spp.
adhesion, 2005
epithelial cells, 2005
spermicidal, 2005

Oligosaccharides
transferrin
binding, 2972
human, 2972
*omp*1 gene
C. psittaci, 2850
promoters
multiple tandem, 2850
Opsonins
C. neoformans growth inhibition, 1201
Opsonization
C. neoformans, 1914
isotype-switch variant antibodies
C. neoformans capsular polysaccharide, 1914
Osmotic protectants
A. actinomycetemcomitans leukotoxin cytolytic activity, 1782
Outer membrane proteins
adhesin, 1017
B. bronchiseptica, 352
B. fragilis, 3954
B. ovis
antibody response, 489
Brucella spp., 3980
C. psittaci
elementary bodies, 1379
epitopes, 1379
C. trachomatis, 1017, 1450, 3438, 3909
H. influenzae, 3388
H. influenzae mutant, 3312
H. somnus, 237
heme uptake, 3954
iron regulated, 2875, 3954
lipoprotein, 3388
N. gonorrhoeae, 1078, 3929
N. meningitidis, 2875
class 1, 569
class 5, 569
nasopharyngeal carriage, 569
N. meningitidis mutants, 1355
Neisseria spp., 3929
P2 mutant, 3312
Pan 1, 3929
PCP, 3388
PII, 1078
transferrin receptor, 2875
vaccines, 2875
Y. pestis, 3262
Yersinia spp., 2245
Yop1, 2245
YopM, 3262
Outer membranes
S. marcescens, 1247
Oxidants
C. albicans
phenotypic switching, 1174
in vitro, 1174
Oxidative burst
lipoteichoic acids, 566
monocytes
human, 566
stimulation, 566
Oxygen radical-mediated killing
iron, 26
phagocytes, 26
S. aureus, 26

p60 protein gene
L. monocytogenes, 1943
probe, 1943
P/J mice
L. major, 4149
macrophage activation, 574
pap-related sequences
E. coli
uropathogenic, 471
Paracoccidioides brasiliensis
macrophages, 2628
phagocytosed, 2628
ultrastructure, 2628
Parasitophorous vacuoles
acidic pH, 779
L. amazonensis-infected macrophages, 779
Pasteurella haemolytica
endothelial cells
bovine, 1671
damage, 1671
pulmonary, 1671
iron acquisition, 2091
leukotoxin, 1485
leukotoxin determinant, 828
lktC gene
nonreciprocal complementation, 828
neutrophil chemiluminescence
bovine, 1485
pathogenic factors, 1671
transferrin receptor
bovine specific, 2091
Peptides
fusion, 1159
immunization
E. coli enterotoxin-producing strains, 1159
Peptostreptococcus magnus
immunoglobulin-binding protein, 1217
protein L, 1217
virulence determinant, 1217
Perfused mouse liver model
C. albicans
hepatic clearance, 2869
killing, 2869
Periodontitis
juvenile, 1085
phagocyte function, 1085

Peripheral blood lymphocytes
CD2 pathway activation, 1114
human, 1114
T. cruzi-induced suppression, 1114
Peripheral blood mononuclear cells
receptor binding competition, 2392
staphylococcal exoproteins, 2392
toxic shock syndrome toxin 1, 2392
Peritoneal cavities
guinea pigs, 536
polymorphonuclear leukocyte accumulation, 536
Pertussis toxin
ADP-ribosyltransferase activity, 746
analog
protective immunogen, 3337
reduced biological activity, 3337
reduced enzymatic activity, 3337
analogs
genetically detoxified, 3653
assembly, 1518
B oligomer, 4063
B. pertussis respiratory infection
protection, 4063
biosynthesis, 1518
interleukin-1β, 4153
lethal infection, 3445
macrophages
inflammatory, 4153
peritoneal, 4153
monoclonal antibodies, 746
protective activities, 3369
NAD-glycohydrolase activity, 746
receptors
T cells, 3840
S1 subunit
biochemical and biological activities, 999
carboxy-terminal region, 1518
disulfide bond, 1518
recombinant, 999
T-cell receptors, 3840
Pertussis toxin mutants
genetically inactivated, 1308
vaccine, 1308
Peyer's patches
G. muris-infected mice, 2683
lymphocyte proliferation, 2683
Pf155/RESA
IFN-γ, 2989
P. falciparum, 854
P. falciparum-immune donors, 2989
repeated sequence, 854
staphylococcal protein A immunoglobulin G-binding domains, 854
pH
Pseudomonas exotoxin, 1415
Phagocytes
human, 4069
iron, 26
lipid A-binding sites, 4069
lungs
parabiotic mice, 2303
mononuclear, 879
mycobacteria, 2303
oxgen radical-mediated killing, 26
periodontitis
juvenile, 1085
S. aureus, 26
T. pallidum subsp. *pallidum*
opsonized, 1167

phoP virulence regulon
defensin resistance phenotypes, 3706
mutations, 3706
S. typhimurium, 3706
Phorbol esters
cyclic GMP, 1402
E. coli heat-stable enterotoxin, 1402
T84 cells, 1402
Phorbol myristate acetate
B. pertussis, 3187
HeLa 229 cells
invasion, 3187
Phosphoinositide metabolism
leukocidin
staphylococcal, 2745
polymorphonuclear leukocytes, 2745
stimulation, 2745
Phospholipase C
inflammatory agent, 659
P. aeruginosa, 659
P. cepacia, 4020
Phospholipase D gene
C. pseudotuberculosis, 131
cloning
E. coli, 131
Phosphomonoesterase
B. abortus, 1153
Pigs
barrier born, 1763
gastritis type B, 1763
H. pylori, 1763
Pili
987P, 4030
adherence, 1129
AF/R1
cloning, 1124
genes, 1124
antibodies
antipeptide, 2727
CS1
major subunit gene, 3594
E. coli
avian strains, 1129
enteroadherent, 1124
enterotoxigenic, 3594, 4030
killing, 3448
O78, 1129
type 1, 3448
epitopes, 2252
H. influenzae, 2252
nontypeable, 903
LKP
cloning, 903
genes, 903
M. bovis
expression in *P. aeruginosa*, 1678
monoclonal antibodies, 124
P. aeruginosa, 124
antipeptide antibodies, 2727
PAK, 2727
PAO, 2727
receptors, 4030
V. cholerae
non-O1, 1640
V. parahaemolyticus
colonization factor, 61
Pilin gene
E. coli
type 1, 275
H. influenzae type b strain M43p$^+$
cloning, 1065
sequence, 1065
M. bovis, 1678
mutation
site directed, 275
Pilins
B. nodosus
B serogroup, 1545
colonization factor antigen I, 874
tcpA, 3042
V. cholerae
TcpA, 3042
type 4, 3042
Pilus expression regulatory genes
conservation in genus *Neisseria*, 4145
N. gonorrheae, 4145
pilA, 4145
pilB, 4145
Plasmids
987P fimbrial gene cluster, 149
attaching effacement
rabbit enterocyte brush border, 1316
B. burgdorferi, 847
B. coriaceae, 1744
conjunctivitis-associated gene locus, 2470
curing, 3084
E. coli
adherence, 1223
enterotoxigenic, 149
O157:H7, 1223
E. coli O111
enteropathogenic, 1316
fimbriae
987P, 149
enterotoxigenic *E. coli*, 149
maintenance regions, 3084
P, 3129
pYY, 841
S. dublin
pSDL2, 1180
S. typhimurium, 3084
Salmonella serotypes
vir-homologous sequences, 1180
virulence, 1180
Salmonella serovars, 3084
V. cholerae
attenuation, 3129
Y. enterocolitica, 2470
Y. pseudotuberculosis, 841
Plasminogen
human, 21
receptors
gram-negative bacteria, 21
Plasminogen activator
endothelial cells, 2459
R. conorii, 2459
R. rickettsii, 2459
tissue type
secretion, 2459
Plasminogen activator inhibitor
endothelial cells, 2459
R. conorii, 2459
R. rickettsiae, 2459
secretion, 2459
Plasmodium berghei
antigenic profile
irradiated sporozoites, 2834
sporozoites
antigenic profile, 2834
irradiated, 2834
Plasmodium chabaudi
blood stage, 3225
IFN-γ, 3225
Plasmodium chabaudi chabaudi
IFN-γ, 3671
Plasmodium falciparum
antibodies
human, 2995
antigens
Pf155/RESA, 854, 2815, 2989
soluble, 2923
sporozoite surface, 2995
anti-idiotypic antibodies, 2815
heat shock-related proteins
immune response, 1408
IFN-γ, 2989
immune donor cells, 2989
invasion inhibition, 2815
macrophages, 214, 2923
neutrophil-mediated killing, 788
Pf155/RESA, 2989
antibodies, 2815
repeated sequence, 854
staphylococcal protein A immunoglobulin G-binding domains, 854
proteins
heat shock related, 1408
sporozoites
surface antigens, 2995
tumor necrosis factor, 214, 2923
tumor necrosis factor alpha, 788
Plasmodium vinckei
immunization
S. typhimurium, 3425
Plasmodium vivax
circumsporozoite protein
T-cell epitope, 575
epitope
T cell, 575
protein
circumsporozoite, 575
T-cell epitope, 575
Platelet-activating factor
S. aureus delta toxin, 1653
Platelets
aggregation
inhibition, 3262
E. coli
cloned, 1591
hemolysin negative, 1591
hemolysin positive, 1591
human, 1591
interactive products, 4117
S. sanguis protoplasts, 4117
signal transduction, 1591
viridans group streptococci
binding, 3802
Y. pestis, 3262
YopM, 3262
Pneumocystis carinii
chitin
immunocytochemical detection, 412
chromosomes, 1705
genes
mapping, 1705
immunoglobulin G
host, 456
localization, 456
proteins
carbohydrate binding, 3143
Pneumonia
hyperoxia, 3487
U. urealyticum, 3487
Polyclonal antibodies
chlamydial lipopolysaccharide, 205
Polymerase chain reaction
E. histolytica
repetitive DNA elements, 1660

syphilis, 2011
T. pallidum
endoflagellar sheath protein, 2025
yaws, 2011
Polymorphonuclear leukocytes
B. gingivalis, 406
bactericidal activity
suppression, 406
colony-stimulating factor
granulocyte-macrophage, 3002
delta-toxin
S. aureus, 2678
human, 406, 2383
leukocidin
staphylococcal, 2745
macrophages, 536
melittin
bee venom peptide, 2678
membrane-fluidizing agents, 3002
metabolism, 2678
muramyl dipeptide, 536
P. aeruginosa
biofilms, 2383
peritoneal cavities
accumulation, 536
phosphoinositide metabolism
stimulation, 2745
Polymyxin B
Vero cytotoxin
glycolipid-binding specificity, 1532
Polypeptides
B. divergens, 4076
cell membrane
T. cruzi binding, 1
S. gordonii
gene inactivation, 3689
Polysaccharide antigens
RIIS/J mice
immune response, 1261
Polysaccharides
capsular, 222
group B streptococcus type III, 687
E. coli, 222
group B streptococcus type III capsular, 687
tetanus toxoid conjugates, 687
Pontiac fever
L. anisa
virulence, 3139
models
cell culture, 3139
guinea pig, 3139
protozoan, 3139
Porins
E. coli, 2719
inflammatory effects, 3183
OmpF, 2719
S. marcescens, 1247
S. typhimurium, 3183
Porphyromonas (Bacteroides) *endodontalis*
antigen
serotype, 2542
monoclonal antibody, 2542
Porphyromonas (*Bacteroides*) *gingivalis*
hemin
binding, 4016
culture medium, 4016
immunization
protective, 3394
protease
trypsinlike, 4016
Primates
C. trachomatis, 593
nonhuman, 593
Procoagulant activity
bacteria, 1821
induction, 1821
viruses, 1821
Promoters
C. psittaci
*omp*1, 2850
Prostaglandin E_2
C. albicans
germ tube formation, 260
C. trachomatis
growth inhibition, 3168
increased synthesis, 3168
tumor necrosis factor, 3168
Prostaglandins
endotoxic induction, 217
lipid A analogs
nontoxic, 217
macrophages
release, 217
Proteases
alkaline, 4083
basement membrane
migration, 347
chymotrypsinlike, 347, 4099
hemin, 4016
immunoglobulin A, 2733
L. amazonensis-infected macrophages, 1730
L. pneumophila, 2585
lysosomal, 1730
macrophages
L. amazonensis infected, 1730
metalloprotease
zinc, 3731
P. aeruginosa, 4083
P. gingivalis, 4016
S. pneumoniae, 2733
secretory protein, 2585
T. denticola, 347, 4099
trypsinlike, 4016
V. anguillarum, 3731
V. cholerae, 4011
V. mimicus, 4159
Protein kinase C
E. coli
enteropathogenic, 761
protein phosphorylation
HEp-2 cells, 761
Protein L
immunoglobulin-binding protein, 1217
P. magnus, 1217
virulence determinant, 1217
Protein malnutrition
T lymphocytes
distribution, 563
$Fc\gamma R^+$, 563
$Fc\mu R^+$, 563
tuberculosis, 563
Protein phosphorylation
E. coli
enteropathogenic, 761
HEp-2 cells, 761
protein kinase C, 761
Protein synthesis
B. burgdorferi, 1038
thermoregulation, 1038
Proteinases
A. flavus, 2529
Candida acid, 508
cysteine, 1396
E. histolytica, 1396
elastinolytic, 2529
H. toruloidea, 2856
kallikrein-kinin system
activation, 2139
plasma, 2139
T. vaginalis, 157
Proteins
B. bronchiseptica, 352
B. burgdorferi, 983, 2404
B. fragilis, 3954
B. ovis, 489
B. piliformis, 1010
Brucella spp., 3980
C3d binding, 309
C. albicans, 309
C. fetus, 2738
C. jejuni, 1749
C. parvum
sporozoites, 2071
C. pneumoniae, 93
C. trachomatis, 1017, 2098, 3061, 3438, 3909
75 kilodalton, 189
early, 2478
carbohydrate binding, 3143
Chlamydia spp., 502
Cryptosporidium spp.
outer oocyst wall, 252
disulfide linked, 3430
DnaK like, 2098
E. coli, 1691
E. faecalis
hemolysin/bacteriocin transport, 3914
E. histolytica, 753
FimH, 1995
H. influenzae, 3272, 3388
H. pylori, 603
heat shock, 719, 3061, 3380
heat shock protein 70 family, 189
heat shock related, 1408
Hi-PAL (P6), 3272
immunoglobulin binding, 1217
immunostimulating, 703
integral membrane, 753, 983
iron regulated, 3036
L2, 2098
L. monocytogenes, 1943, 3582
L. pneumophila, 2585, 3380
lectin binding, 502
M. avium complex
monoclonal antibodies, 1445
M. leprae, 703
M. pneumoniae
cytadherence phase variation, 3430
M. tuberculosis, 245
mycobacterial antigen 85 complex genes, 272
N. gonorrhoeae, 719, 3929
N. meningitidis, 569, 2875, 3036
Neisseria spp., 3929
OmpA
antibody response, 1691
immunization, 1691
periplasmic C-terminal domain, 1691
outer membrane, 352, 489, 569, 1017, 2245, 2875, 3262, 3388, 3438, 3909, 3929, 3954, 3980
p60, 1943
P. carinii, 3143
P. falciparum, 1408
P. magnus, 1217

Pan 1, 3929
PspA, 3293
S. pneumoniae, 3293
S. sobrinus, 2276
salivary proline rich
binding to *A. viscosus* fimbriae, 1986
secretory, 2585
SpaA, 2276
stress, 3582
surface array, 2738
Y. pestis, 3262
Yersinia spp., 2245
yersiniae, 2840
Yop
secretion, 2840
Proteolysis
C. perfringens type A enterotoxin, 1999
Proteolytic activity
burned mice, 1527
C. albicans
virulence, 1527
Proteus mirabilis
ascending urinary tract infection
mouse model, 1120
fimbriae
tissue-binding affinity, 3330
immunoglobulin degradation
IgA1, 1979
IgA2, 1979
IgG, 1979
proteolytic enzyme, 1979
urease-negative mutant
virulence, 1120
Proteus spp.
hemolysins
cytotoxic activity, 1861
HlyA, 1853
HpmA, 1853, 1861
prtA gene
T. denticola, 4099
Pseudomonas aeruginosa
adherence, 1301
adhesion
inhibition, 124
pilus mediated, 124
alginate, 1344
cystic fibrosis sputum, 3363
inflammatory response, 3363
alkaline protease
structural gene, 4083
alveolar epithelial permeability, 433
antibodies
antipeptide, 2727
B cells, 808
binding
glycosphingolipids, 107
neutral glycosphingolipids, 114
rabbit corneal epithelium, 107
biofilms, 2383
buccal epithelial cells, 124
chemotactic properties, 1489
corneal epithelium
rabbit, 114
corneas
mouse, 1301
cystic fibrosis
pulmonary colonization, 1489
cytokines
proteolytic inactivation, 3009
elastase, 433
V. cholerae hemagglutinin/protease, 4011
epithelium
alveolar, 433
permeability, 433
exopolysaccharide
immunogenic properties, 1835
mucoid, 1344, 1835
oxygen-dependent up-regulation, 1344
exotoxin
low pH-induced changes, 1415
Triton X-114 binding, 1415
exotoxin A, 978
glycosphingolipid receptors, 2361
glycosphingolipids
binding, 107, 114
corneal epithelium, 114
neutral, 107, 114
rabbit corneal epithelium, 107
granulocyte colony-stimulating factor
antibiotics, 2502
therapeutic efficacy, 2502
inflammatory agent, 659
interleukin-1, 978
lipopolysaccharides
common antigen, 1030
growth-dependent changes, 1030
serotype specific, 1030
lipoprotein I, 2241
M. bovis pili, 1678
macrophages
peritoneal, 978
monoclonal antibodies
antiflagellum, 3819
pili, 124
protective, 3819
monocytes, 808
mucinophilic properties, 1489
mucoid exopolysaccharide
immunogenic properties, 1835
OprI, 2241
phospholipase C, 659
pili
antipeptide antibodies, 2727
monoclonal antibodies, 124
PAK, 2727
PAO, 2727
polymorphonuclear leukocytes, 2383
pyocyanine, 808
rabbit corneal epithelium, 107
receptors
glycosphingolipids, 2361
T cells, 808
toxin A
secretion by *E. coli*, 1133
vaccines
OprI, 2241
Pseudomonas cepacia
adherence enhancement
P. aeruginosa, 2578
epithelial cells
respiratory, 2578
hemolysin, 4020
phospholipase C, 4020
Pulmonary antibacterial defenses
influenza virus infection, 2809
Pulsed-field gel electrophoresis
S. mutans GS-5 chromosome size, 838
Pyelonephritis
U. urealyticum, 3401
Pyocyanine
B cells, 808
monocytes, 808
P. aeruginosa, 808
T cells, 808
PZ-PLGPA-hydrolyzing activity gene
T. denticola, 4099

Rabbits
corneal epithelium, 107
glycosphingolipids, 107
P. aeruginosa binding, 107
Rat intraperitoneal diffusion chambers
S. marcescens
outer membrane, 1247
porin, 1247
Receptors
C3d, 909
C. albicans
avirulent mutant, 909
germ tubes, 48
Dr, 279
E. coli heat-stable enterotoxin, 1817
E. coli type 1 fimbrial lectin, 3073
enterotoxin
E. coli, 1817
heat stable, 1817
fibronectin, 2593
gangliosides
erythrocytes, 2555
glycolipid, 611
glycosphingolipids, 2361
gram-negative bacteria, 21
H. influenzae
epithelial, 3807
erythrocyte, 3807
inheritance, 3807
iC3b, 909
ileal mucus
porcine, 3178
immunoglobulin A
secretory, 3073
intestinal, 1817
K88 fimbria specific, 3178
lactosylceramide, 2085
laminin, 48
N. gonorrhoeae
PII outer membrane proteins, 2777
N. meningitidis, 2875
N. subflava, 2555
neutrophil
up-regulation, 2777
oligosaccharide, 3073
P. aeruginosa, 2361
P. haemolytica, 2091
peripheral blood mononuclear cells, 2392
pertussis toxin, 3840
pili
987P, 4030
plasminogen
human, 21
Shiga-like toxin type II, 611
T cells, 3840
transferrin, 2091, 2875
bacterial, 2972
yeasts, 2085
Removable intestinal tie rabbit model
Aeromonas strains
diarrhea, 1924
intestinal invasiveness, 1924
Renal tubular cells
E. coli adherence, 3434
Renal tubular necrosis
E. coli
enterohemorrhagic, 3959
Shiga-like toxin type II, 3959

Respiratory burst activation
neutrophil killing
type 1 fimbria-bearing *E. coli*, 37
Restriction fragment length polymorphisms
cytadhesin P1 gene, 2017
E. coli
uropathogenic, 471
M. pneumoniae
cytadhesin P1 gene, 2017
pap-related sequences, 471
rrn operons, 471
Rhodobacter capsulatus
cytokine induction, 3743
lipopolysaccharide, 3743
Rhodopseudomonas sphaeroides
lipopolysaccharide
nontoxic, 2862
suppressor T cell activity
inactivation, 2862
Rickettsemia
A. marginale infection
cattle, 1117
cattle, 1117
cyclic, 1117
Rickettsia conorii
endothelial cells, 2459
growth inhibition, 1886
IFN-γ, 1886
plasminogen activator, 2459
plasminogen activator inhibitor, 2459
tumor necrosis factor alpha
recombinant, 1886
vaccine
boutonneuse fever, 646
recombinant, 646
Rocky Mountain spotted fever, 646
Rickettsia prowazekii
IFN-α/β resistant, 3279
IFN-γ resistant, 3279
L929 cells, 3279
Rickettsia rickettsii
antigen
protective, 2760
protein, 2760
tandemly repeated sequences, 2760
endothelial cells, 2459
plasminogen activator, 2459
plasminogen activator inhibitor, 2459
protein antigen
protective, 2760
tandemly repeated sequence, 2760
Rickettsia tsutsugamushi
sta56
cloning, 2076
sequence, 2076
strain-specific epitope, 2076
Sta58 homology
stress proteins, 1360
Sta58 major antigen gene
cloning, 1360
Rickettsiosis
spotted fever group
Japan, 887
RIIS/J mice
immunodeficiency, 1261
polysaccharide antigens
immune response, 1261
RNA synthesis
Chlamydia spp., 3194
rns homologs
colonization factor antigens, 3442
E. coli, 3442
rns-like regulatory gene
colonization factor antigen I pilin, 874
Rocky Mountain spotted fever
vaccine
recombinant *R. conorii*, 646
rrn operons
E. coli
uropathogenic, 471

Salmonella choleraesuis
mutants
rough, 2493
virulence, 2493
O antigen deficient
virulence, 2493
Salmonella dublin
aroA vaccine strains
antibody response, 2523
B. pertussis filamentous hemagglutinin, 2523
pSDL2
vir region, 1180
Salmonella serotypes
virulence, 1180
vaccine strains
aroA, 2523
Salmonella gallinarum
immunity, 2283
virulence plasmid-cured derivative, 2283
Salmonella paratyphi B
clonal phylogeny, 1891
genetic population structure, 1891
pathogenicity, 1891
Salmonella serotypes
S. dublin
pSDL2, 1180
vir-homologous sequences, 1180
virulence
plasmid mediated, 1180
Salmonella serovars
clones, 2262
enteric fevers, 2262
genetic relationships
evolutionary, 2262
plasmid curing, 3084
S. typhimurium virulence plasmid maintenance regions
conservation, 3084
typhoid fever, 2262
Salmonella typhi
cholera hybrid vaccine, 1620
Ty21a, 1620
Salmonella typhimurium
anaerobiosis, 2014
animal cells
invasion, 443
replication, 443
aroA live vaccines
immunodeficiency, 2258
susceptibility, 2258
attenuated, 2048
B. abortus protein, 2048
calves, 439
clearance, 573
defensin resistance phenotypes, 3706
DNA supercoiling
inv genes, 1879
endotoxin
hypersensitivity, 935
fimbriae
type 1, 2014
flagella
mutants, 137
growth phase, 2014
H-2 complex
regions, 573
HEp-2 cells
invasion, 2014
immunization, 2048
E. coli OmpA protein, 1691
inv genes
DNA supercoiling, 1879
invasion, 443
motility
mutants, 137
mutants
flagellar, 137
nonmotile, 137
nonmotile, 137
P. vinckei
immunization, 3425
phoP virulence regulon
mutations, 3706
plasmid curing, 3084
plasmids
recombinant, 2048
virulence, 2651
porins
inflammatory effects, 3183
protein
28,000 molecular weight, 2651
replication, 443
septicemic salmonellosis, 439
sublethal infection, 935
tumor necrosis factor
circulating, 439
hypersensitivity, 935
vaccines
aroA, 2258
live, 2258
virulence plasmid gene
28,000-molecular-weight protein, 2651
virulence plasmid maintenance regions
conservation, 3084
Schistosoma mansoni
bronchoalveolar lavage cells
larvicidal activity, 3903
Schistosomiasis mansoni
chronic, 816
eosinophil granulocytes
extramedullar proliferation, 816
granulomas, 1577
lymphocytes, 1577
macrophages
inflammatory, 816
mice, 1577
mononuclear cells
adherent, 1577
Secretory immune responses
mucosal surface pathogens, 1932
protective, 1932
Sepsis
bacteriology, 619
cecal ligation and puncture, 619
model
aged mice, 619
Serratia marcescens
C5a
inactivation of chemotactic activity, 1269
outer membrane, 1247
porin, 1247
protease, 1269
rat intraperitoneal diffusion chambers, 1247

Serum factor-induced resistance
antibody, 914
H. influenzae, 914
Serum resistance
E. coli
capsular polysaccharide, 222
K-1-positive blood culture isolates, 222
Shiga toxin/Shiga-like toxin I B subunit
production, 2977
purification, 2977
Shiga-like toxin II variant
characterization, 1232
E. coli, 1232
purification, 1232
Shiga-like toxin type II
glycolipid receptor specificities, 611
renal tubular necrosis, 3959
variants, 611
Shigella dysenteriae
attachment, 2401
epithelial cell lines, 2401
invasion, 2401
Shigella flexneri
catalase, 529
fibroblasts, 399
human leukocyte antigens
class I, 1774
cross-reactivity, 1774
interferon, 399
metabolism
intracellular, 399
monoclonal antibodies, 1774
pathogenesis, 529
superoxide dismutase, 529
Shigella sonnei
immunoglobulin A-secreting cells
peripheral blood, 2002
Signal transduction
E. coli
cloned, 1591
hemolysin negative, 1591
hemolysin positive, 1591
platelets
human, 1591
Slime production
S. epidermidis
antigenic marker, 2906
Sphingomyelinase C gene
L. interrogans serovar hardjo, 2177
*sta*56 gene
cloning, 2076
R. tsutsugamushi, 2076
sequence, 2076
Sta58 major antigen gene
cloning, 1360
R. tsutsugamushi, 1360
sequence, 1360
stress proteins
homology, 1360
Staphylococcal exoproteins
peripheral blood mononuclear cells, 2392
toxic shock syndrome toxin 1
receptor binding competition, 2392
Staphylococcal protein A
immunoglobulin G-binding domains, 854
P. falciparum, 854
Pf155/RESA, 854
Staphylococcal variant enterotoxin gene
bacteriophage, 1614
sezA$^+$, 1614
silent, 1614
Staphylococci
clindamycin treated, 197
coagulase negative, 2144
hemolytic substances, 2144
macrophages, 197
wall degradability
reduction, 197
Staphylococcus aureus
arachidonic acid cascade products
plasma, 3494
attachment
fibronectin-containing substrates, 2593
delta-toxin, 1653, 2678
enterotoxin A, 2067
enterotoxin B, 3494
fibronectin receptor
peptide analogs, 2593
granulocytes
functions, 1653
iron, 26
monkeys, 3494
oxygen radical-mediated killing, 26
phagocytes, 26
platelet-activating factor
metabolism, 1653
toxic shock syndrome toxin 1
environmental conditions, 1026
mutants, 3020
toxic shock syndrome-like illness
rabbits, 2067
Staphylococcus aureus capsular polysaccharide-*P. aeruginosa* exotoxin A conjugates
immunologic properties, 2367
synthesis, 2367
Staphylococcus epidermidis
adherence, 315
deltalike toxin
amino acid sequence, 1473
fibrin-platelet clots, 315
lipoteichoic acid, 315
slime production
antigenic marker, 2906
Staphylococcus simulans
capsule
antiphagocytic effect, 1350
Streptococci
adherence
fibronectin mediated, 3015
antibodies
phosphorylase cross-reactive, 774
β antigen, 332
capsular polysaccharide
tetanus toxoid conjugates, 687
type III, 687
coaggregation
C. albicans, 1429
colloidal gold immunolabeling, 332
fibrin thrombi, 3015
group A, 3015
group B, 332, 687
type II, 1789, 3663
group C, 3015
immunoglobulin A
nonimmune binding, 1789
opsonic effect, 3663
immunoglobulin A1 degradation, 1186
immunoglobulin-binding site, 332
jacalin
opsonic effect, 3663
M protein, 774
oral, 1186
phosphorylase cross-reactive antibodies, 774
tetanus toxoid conjugates, 687
viridans group
platelet binding, 3802
Streptococcus agalactiae
model
mice, 3093
septic arthritis, 3093
type 4, 3093
Streptococcus downei
glucosyltransferase
soluble glycans, 2452
gtfS, 2452
Streptococcus gordonii
cell surface
composition, 3689
polypeptide, 3689
properties, 3689
polypeptide gene
cell surface, 3689
insertional inactivation, 3689
Streptococcus gordonii (*S. sanguis*)
coaggregation
A. naeslundii, 3064
adhesin mediated, 3064
Streptococcus lactis
immunization, 2929
S. mutans surface protein antigen gene, 2929
Streptococcus milleri
actinomyces, 163
coaggregation
actinomyces, 163
cellular, 163
Streptococcus mutans
cell surface protein antigen mutants
adherence, 289
aggregation, 289
surface hydrophobicity, 289
fructose-1,6-diphosphate-dependent L-(+)-lactate dehydrogenase gene
cloning, 1290
gbp
sequence, 667
glucan-binding protein gene sequence, 667
glucosyltransferase activity
inhibition, 1509
subsequence peptide antiserum, 1509
GS-5 chromosome
size, 838
heart cross-reactivity, 3545
immunization, 3407
monoclonal antibodies, 3407
mutacin-associated gene, 4126
mutants
carbohydrate negative, 543
pulsed-field gel electrophoresis, 838
S. lactis
immunization, 2929
recombinant, 2929
serotype c, 289
streptozotocin
uptake, 543
sucrose phosphotransferase activity
low affinity, 1479
sucrose-metabolizing genes
linkage, 3462
surface protein antigen gene, 2929
Tn*916*, 4126
trehalose uptake system
high affinity, 1479

virulence genes
regulation of expression, 464
Streptococcus mutans group
antigens
cross-reactivity, 2276
surface, 2276
S. sobrinus SpaA antigen I, 2276
Streptococcus pneumoniae
antibody
anticapsular, 3871
protection, 3871
serotype 4, 3871
capsule production
interruption, 3135
immunoglobulin A protease, 2733
proteins
PspA, 3293
PspA, 3293
Tn*916*, 3135
Streptococcus pneumoniae type 12F polysaccharide
antibody response
serum, 2309
diphtheria toxoid conjugate, 2309
Streptococcus pneumoniae type 12F-diphtheria toxoid conjugate
immunization, 2547
peripheral blood lymphocytes
antibody secreting, 2547
Streptococcus pyogenes
lipoteichoic acid, 3779
Streptococcus rattus
enolase
characterization, 1043
inhibition kinetics, 1043
isolation, 1043
Streptococcus sanguis
coaggregation
C. albicans, 1429
endocarditis, 515
platelet-interactive products, 4117
protoplasts, 4117
virulence factors
phenotypic characterization, 515
Streptococcus sobrinus
S. mutans group surface antigens, 2276
SpaA
antigen I, 2276
cross-reactivity, 2276
sucrose:3-α-D-glucosyltransferase
glucan-binding domain, 2165
Streptozotocin
S. mutans
carbohydrate-negative mutants, 543
inhibition, 543
uptake, 543
Stress proteins
homology
R. tsutsugamushi Sta58, 1360
L. monocytogenes, 3582
Sucrose phosphotransferase activity
low affinity, 1479
S. mutans, 1479
trehalose uptake system
high affinity, 1479
Sucrose:3-α-D-glucosyltransferase
glucan-binding domain, 2165
S. sobrinus, 2165
Sucrose-metabolizing genes
linkage, 3462
S. mutans, 3462
Superantigens
microbial, 2409
Superoxide anion generation
neutrophils, 1647
Superoxide dismutase
M. leprae, 1937
monoclonal antibodies, 3122
N. asteroides, 3122
S. flexneri
pathogenesis, 529
Surface array proteins
binding
lectin mediated, 2738
type A lipopolysaccharide, 2738
C. fetus, 2738
lipopolysaccharide
lectin-mediated binding, 2738
type A, 2738
Swollen-head syndrome
E. coli
avian strains, 3613
genetic relationships, 3613
Syphilis
anti-idiotypic antibodies, 766
DNA probes, 2011
experimental, 766
immunization, 3158
polymerase chain reaction, 2011
rabbits, 3158
T. pallidum endoflagella, 3158
yaws, 2011

T7 expression system
T. pallidum endoflagellar sheath protein, 2025
T84 cells
cyclic GMP, 1402
E. coli heat-stable enterotoxin, 1402
phorbol esters, 1402
T cells
antibody response magnitude regulation, 3465
antileishmanial defense, 1146
B. abortus, 254
blastogenesis, 2313
CD2, 1843
CD antigens, 3877
cecum, 88
Chagas' disease, 3588
cholera toxin specific
activation, 3711
cytotoxic, 3574
depletion, 1496
diet, 1843
differentiation, 3973
E. falciformis, 1496
E. histolytica antigen, 3941
effector, 1496
epitope
P. vivax circumsporozoite protein, 575
erythrocyte receptor bearing, 1843
F. tularensis antigens, 2664
$Fc\gamma R^+$, 563
$Fc\mu R^+$, 563
flow cytometry, 1685
functional changes, 3163
heart tissue
binding, 3588
helper
excreted secreted antigen specific, 2120
helper cell clones
B. gingivalis antigen, 2785
hybridomas, 1146
immune, 254, 1685
interleukin-1, 3973
interleukin-2 receptor, 3847
Kupffer cells, 2313
L. donovani, 3163
L. major, 1146
L. monocytogenes, 2313, 3973
lipopolysaccharide
R. sphaeroides, 2862
M. avium-M. intracellulare, 1369
M. lepraemurium, 3531
macrophages
activation, 1146
malaria
immunity, 2946
monocyte accessory cell activity, 1369
monophosphoryl lipid A binding, 726
P. aeruginosa, 808
P. vivax
circumsporozoite protein epitope, 575
pertussis toxin
receptors, 3840
phenotypic changes, 3163
polysaccharide antigens
antibody response, 3465
proliferation
suppression, 1369
protein malnutrition, 563
pyocyanine, 808
R. sphaeroides nontoxic lipopolysaccharide, 2862
receptors
pertussis toxin, 3840
suppressor
antigen reactive, 3531
enrichment of activity, 726
inactivation, 2862
suppressor factors
biological properties, 3531
T. annulata, 3847
T. cruzi
antigens, 1437
T. gondii
protection, 2120
T. hyodysenteriae, 88
T. pallidum subsp. *pertenue*, 1685
T. parva, 3574, 3847
Tac antigen, 3847
toxic shock syndrome toxin 1, 3877
tuberculosis, 563, 1843
T helper cell clones
B. gingivalis antigen, 2785
T-cell hybridomas
H. capsulatum reactive, 1538
T-cell mitogens
M. arthritidis, 228
proliferative responses
inhibition, 228
T-cell subsets
delayed-type hypersensitivity, 654
L. monocytogenes
delayed-type hypersensitivity, 654
systemic protection, 654
systemic protection, 654
tcpA gene
V. cholerae, 3042
Tetanolysin
M. gallisepticum, 598
transmembrane diffusion channels, 598
Tetanus
vaccination
oral, 1323
Salmonella carrier, 1323

Tetanus toxin
cloning, 1004
disulfide bond
interchain, 4136
neurotoxicity, 4136
fragment C, 1004
Tetanus toxoid
conjugates, 687
group B streptococcus type III capsular polysaccharide conjugates, 687
Theileria annulata
T cells
Tac expression, 3847
Theileria parva
buffaloes, 3574
immunization, 3574
λgt11 clones, 1828
sporozoites
antigenic determinants, 1828
T cells
cytotoxic, 3574
Tac expression, 3847
T-helper cells
antigen specific, 3248
T. cruzi, 3248
Thermal injury
bacterial translocation, 3257
glucocorticoid elevations, 3257
Thermoregulation
B. burgdorferi protein synthesis, 1038
THP-1 cells
mycoplasmas, 3564
tumor necrosis factor, 3564
Tn*phoA* mutagenesis
V. cholerae iron-regulated virulence determinant, 55
Tn*phoA* mutants
E. coli
enteropathogenic, 1565
HEp-2 cells
invasion, 1565
Toxic shock syndrome toxin 1
environmental conditions, 1026
major histocompatibility complex class II
binding, 3877
mitogenicity, 3020
monoclonal antibody
neutralizing, 3020
recognition, 3020
mutants, 3020
peripheral blood mononuclear cells, 2392
staphylococcal exoproteins
receptor binding competition, 2392
T cells
CD antigens, 3877
Toxic shock syndrome-like illness
enterotoxin A, 2067
rabbits, 2067
Toxin A
C. difficile
cytopathologic effects, 2329
E. coli, 1133
P. aeruginosa, 1133
secretion
E. coli, 1133
Toxin A gene
C. difficile, 480
Toxin inhibitors
adherent bacteria, 3737
tissue culture cells, 3737
Toxoplasma gondii
antibody responses
intestinal secretions, 1240
isotypic profiles, 2446
milk, 1240
sera, 1240
antigens, 1240
encephalitis, 3050
fibroblasts, 833
IFN-γ
growth inhibition, 833
recombinant, 3050
treatment, 3050
immunoglobulin A
target antigens, 2446
macrophages
microbicidal activities, 263
N. caninum infection, 2699
protection, 2120
T cells
excreted secreted antigen-specific helper, 2120
Trachoma
heat shock proteins, 3061
Transferrin
human, 2972
mycobacterial heat shock protein
cross-reactivity, 1461
homology, 1461
oligosaccharides, 2972
P. haemolytica, 2091
receptor, 2091
receptors
bacterial, 2972
Transmembrane diffusion channels
M. gallisepticum, 598
tetanolysin, 598
Transposon mutants
V. vulnificus
acapsular, 1769
phenotypic evaluation, 1769
Transposons
987P gene cluster, 801
E. coli
enterotoxigenic, 801
mutacin-associated gene, 4126
S. mutans, 4126
S. pneumoniae capsule production, 3135
ST_{pa}, 801
*Tn*916, 3135, 4126
Trehalose uptake system
high affinity, 1479
S. mutans, 1479
sucrose phosphotransferase activity
low affinity, 1479
Treponema denticola
adherence
fibronectin, 3924
tip oriented, 3924
basement membrane
migration, 347
fibroblasts
gingival, 1720
human, 1720
interaction, 1720
fibronectin, 3924
protease
chymotrypsinlike, 347, 4099
prtA, 4099
PZ-PLGPA-hydrolyzing activity gene, 4099
Treponema hyodysenteriae
chick cecal model
swine dysentery, 3348
mast cells
mucosal, 88
T cells, 88
Treponema pallidum
anti-idiotypic antibodies, 766
endoflagella, 3158
endoflagellar sheath protein
expression in *E. coli*, 2025
immunization, 3158
immunogen
lipoprotein, 384
membrane, 384
lipoprotein, 384
rabbits, 3158
Treponema pallidum subsp. *pallidum*
cloning
endoflagellar genes, 1697
endoflagellar genes
class B, 1697
cloning, 1697
expression, 1697
sequencing, 1697
phagocytosis, 1167
opsonized, 1167
Treponema pallidum subsp. *pertenue*
hamsters, 1685
T cells
flow cytometry, 1685
immune, 1685
Trichomonas vaginalis
adherence, 1634
HeLa cells, 1634
immunosuppression, 3553
lymphocytes, 3553
mitogens, 3553
monoclonal antibodies, 1634
motility
inhibition, 1634
proteinases, 157
Triton X-114
Pseudomonas exotoxin binding, 1415
Tritrichomonas foetus
antibody, 944
antigens, 3078
complement
alternative bovine pathway, 944
cytotoxic effects, 3627
hemolytic effects, 3627
killing, 944
mammalian cells, 3627
monoclonal antibodies, 3078
Trypanosoma brucei
B-cell responses, 2337
variant surface glycoprotein epitopes, 2337
Trypanosoma cruzi
antigens, 1437
host cell membrane polypeptide affinity, 1812
binding
cell membrane polypeptides, 1
selective, 1
blood forms
lysis, 119
CD2 pathway, 1114
Chagas' disease
immune sera, 1437
culture supernatants, 1812
genomic variation, 3217
lysis

antibody mediated, complement dependent, 119
blood forms, 119
modulation of sensitivity, 119
macrophages
microbicidal activities, 263
multicopy genes, 3217
neuraminidase
immunocytochemical localization, 586
peripheral blood lymphocytes
human, 1114
suppression, 1114
T cells, 1437
binding to heart tissue, 3588
T-helper cells
antigen specific, 3248
Trypanosoma musculi
elimination
immunoglobulin mediated, 1971
immunological, 1965
Kupffer cells, 1971
leukocytes, 1971
liver perfusion model, 1965
population regulation
immune, 1757
nonimmune, 1757
Tuberculosis
blacks, 632
macrophages, 632
monocytes, 3286
pulmonary, 3286
tumor necrosis factor alpha, 3286
whites, 632
Tumor necrosis factor
C. albicans, 1073, 2750
circulating, 439
fibrinogen increase, 2750
GG2EE macrophage cell line, 1073
hypersensitivity
S. typhimurium induction, 935
inflammation, 297
macrophages, 214, 2923
mycoplasmas, 3564
neutrophils
cutaneous air pouches, 297
lipopolysaccharide-induced accumulation, 297
P. falciparum, 214
P. falciparum antigens
soluble, 2923
protein kinase C, 3564
S. typhimurium, 935
salmonellosis
calves, 439
septicemic, 439
THP-1 cells, 3564
tuberculostatic macrophage functions, 2675
Tumor necrosis factor alpha
antibody, 2397
C. trachomatis
growth inhibition, 3168
host defense, 1572
diphtheria toxin, 2644
immunoglobulin preparation for intravenous use, 1384
intoxication pathway, 2644
killing, 2644
lipopolysaccharide-induced phenomena
differential inhibition, 2397
monocytes, 3286
mononuclear leukocytes
human, 3996
stimulated, 3996
neutrophils, 788
P. falciparum
neutrophil-mediated killing, 788
prostaglandin synthesis, 3168
R. conorii
growth inhibition, 1886
recombinant, 1886
suppression, 1384
tuberculosis, 3286
Tumor necrosis factor beta
mononuclear leukocytes
human, 3996
stimulated, 3996
Typhoid fever
Salmonella serovar clones
evolutionary genetic relationships, 2262

Ureaplasma urealyticum
antigens
serovar-cross-reactive epitopes, 3679
serovar-specific epitopes, 3679
variable, 3679
hyperoxia, 3487
pneumonia, 3487
pyelonephritis
biochemistry, 3401
histology, 3401
Ureases
epithelial cells
gastric, 1992
toxicity, 1992
H. pylori, 992, 1992
Urinary tract
P. mirabilis fimbriae
tissue-binding affinity, 3330
Urinary tract infection
ascending
mouse model, 1120
P. mirabilis
urease-negative mutant, 1120

Vaccination
A. pleuropneumoniae
cell extract, 358
leishmaniasis
cutaneous, 2198
leprosy, 711
M. leprae subunits, 711
oral, 1323
Salmonella carrier
live attenuated, 1323
tetanus, 1323
Vaccines
boutonneuse fever, 646
C. psittaci
major outer membrane protein, 3101
E. coli
O-polysaccharide conjugates, 373
immunodeficiency, 2258
liposomes
anti-idiotypic antibodies, 1932
live, 2258
M. pulmonis
temperature-sensitive mutants, 2289
mucosal surface pathogens, 1932
N. meningitidis outer membrane proteins, 2875
oral, 1932
P. aeruginosa
lipoprotein I, 2241
pertussis toxin analogs
genetically detoxified, 3653
pertussis toxin mutants
genetically inactivated, 1308
R. conorii
recombinant, 646
recombinant, 646, 3653
Rocky Mountain spotted fever, 646
S. aureus capsular polysaccharide-*P. aeruginosa* exotoxin A conjugates, 2367
S. dublin aroA strains
antibody response, 2523
B. pertussis filamentous hemagglutinin, 2523
S. typhi Ty21a, 1620
S. typhimurium
aroA, 2258
live, 2258
S. typhi-S. sonnei, 2002
typhoid-cholera hybrid
cholera challenge, 1620
V. cholerae, 1620
V. cholerae CVD103
immunogenicity, 1481
recombination-deficient derivative, 1481
whooping cough, 1308
recombinant, 3653
Vaccinia virus
B. anthracis protective antigen gene, 366
M. leprae proteins, 4089
M. tuberculosis proteins, 4089
Vero cytotoxin
glycolipid-binding specificity
modification, 1532
peptides
cyclic amphipathic, 1532
polymyxin B, 1532
Vibrio anguillarum
invasion, 3731
zinc metalloprotease, 3731
Vibrio cholerae
attenuation, 3129
Caco-2 cells
virulence model, 3415
cholera toxin genes
cloning, 4142
sequence, 4142
CtxA$^-$ strain, 4142
cytolysin/hemolysin
activation, 4106
heat-stable enterotoxin
monoclonal antibody, 2755
non-O1, 2755
Y. enterocolitica, 2755
heat-stable enterotoxin gene
cloning, 3325
sequence, 3325
hemagglutinin/protease
P. aeruginosa elastase, 4011
hemagglutinins, 3698
hemolysin
HlyA, 3375
hlyA, 4106
proteolytic processing, 3375
iron-regulated virulence determinant, 55
monoclonal antibody, 2755
mutation
high frequency, 3633
spontaneous, 3633
NAG-ST gene, 3325
nonmotile phenotype, 3633

pili
non-O1, 1640
pilins
TcpA, 3042
type 4, 3042
plasmid
P, 3129
S. typhi Ty21a, 1620
tcpA pilin gene, 3042
Tn*phoA* mutagenesis, 55
traveler's diarrhea, 3325
typhoid hybrid vaccine, 1620
vaccine
typhoid hybrid, 1620
vaccine strain CVD103
immunogenicity, 1481
recombination-deficient derivative, 1481
virulence model, 3415
Vibrio damsela
damselysin gene
cloning, 266
Vibrio mimicus
protease, 4159
Vibrio parahaemolyticus
colonization factor, 61
hemolysins
gastroenteritis, 3568
thermostable direct, 3568
thermostable direct related, 3568
pili, 61
Vibrio vulnificus
acapsular transposon mutants
phenotypic evaluation, 1769
cytolysin gene, 2706
mutants
acapsular, 1769
transposon, 1769
V. cholerae El Tor hemolysin gene, 2706
Villi
E. coli adhesion, 2690
intestinal, 2690
Villous function
E. coli
nontoxigenic colonizing, 1337
impaired, 1337

Wolinella recta
surface characteristics
correlation of structure with function, 2770

Yaws
DNA probes, 2011
polymerase chain reaction, 2011
syphilis, 2011
Yersinia enterocolitica
cholera toxin B subunit, 2420
conjunctivitis-associated gene locus, 2470
heat-stable enterotoxin gene
sequence, 2983
immunization, 2420
inv-homologous sequences
nonpathogenic isolates, 1059
monoclonal antibody
heat-stable enterotoxin, 2755
V. cholerae non-O1 heat stable enterotoxin, 2755
plasmid
virulence, 2470
yst, 2983
Yersinia pestis
antigens
pH 6, 2569
platelet aggregation, 3262
virulence, 3262
YopM, 3262
Yersinia pseudotuberculosis
extracellular localization
electron microscopic evidence, 841
in vivo, 841
Yersinia spp.
interferon, 2245
invasiveness, 2245
Yop1, 2245
Yop proteins
secretion, 2840
yopA, 2245
yst, 2983
yopA gene
interferon, 2245
Yop1, 2245
yst gene
heat-stable enterotoxin, 2983
sequence, 2983
Y. enterocolitica, 2983
yersiniae
nonpathogenic, 2983
pathogenic, 2983

1.0
1.1
1.25
1.4
1.6
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.8